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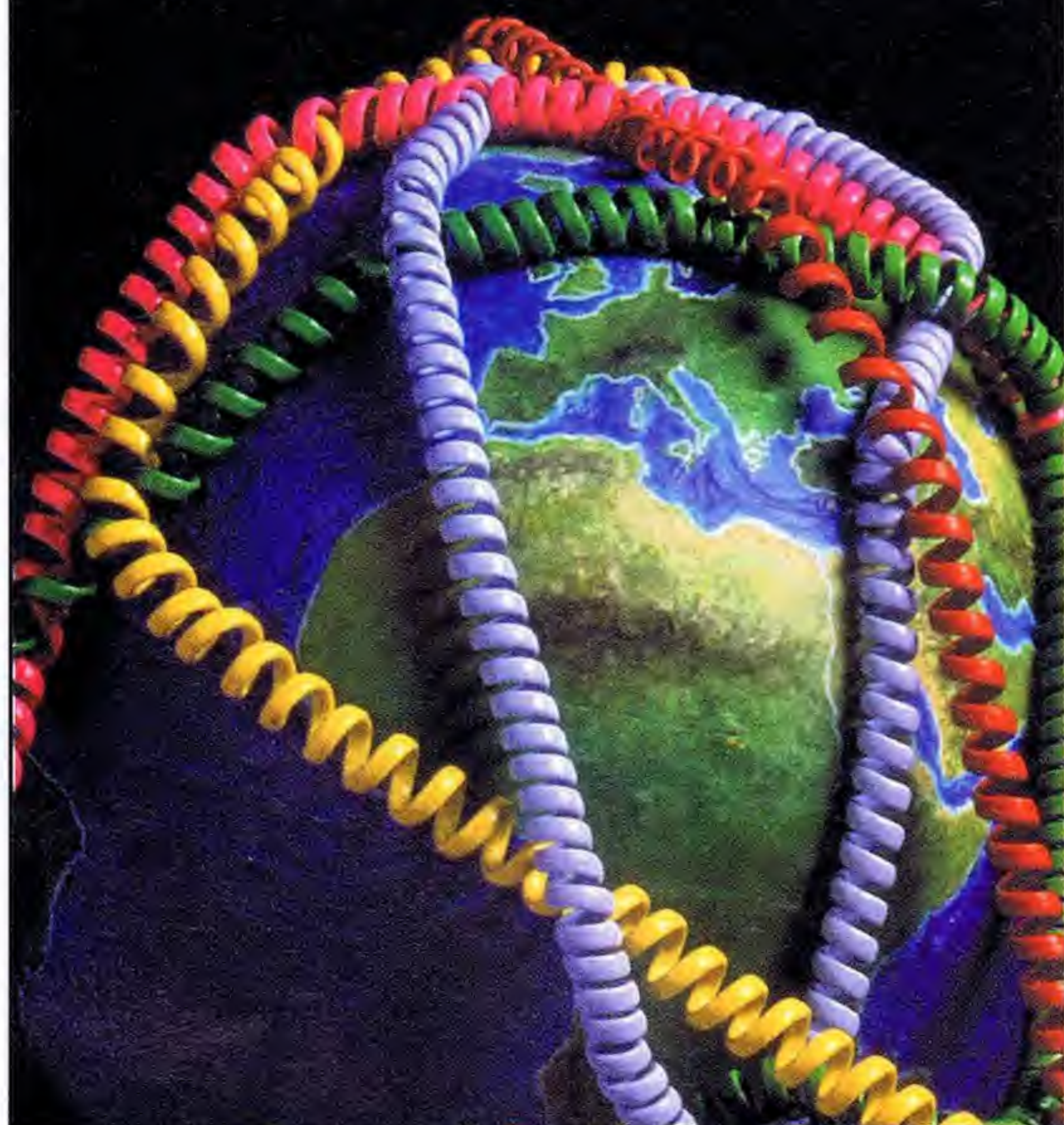
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to talk

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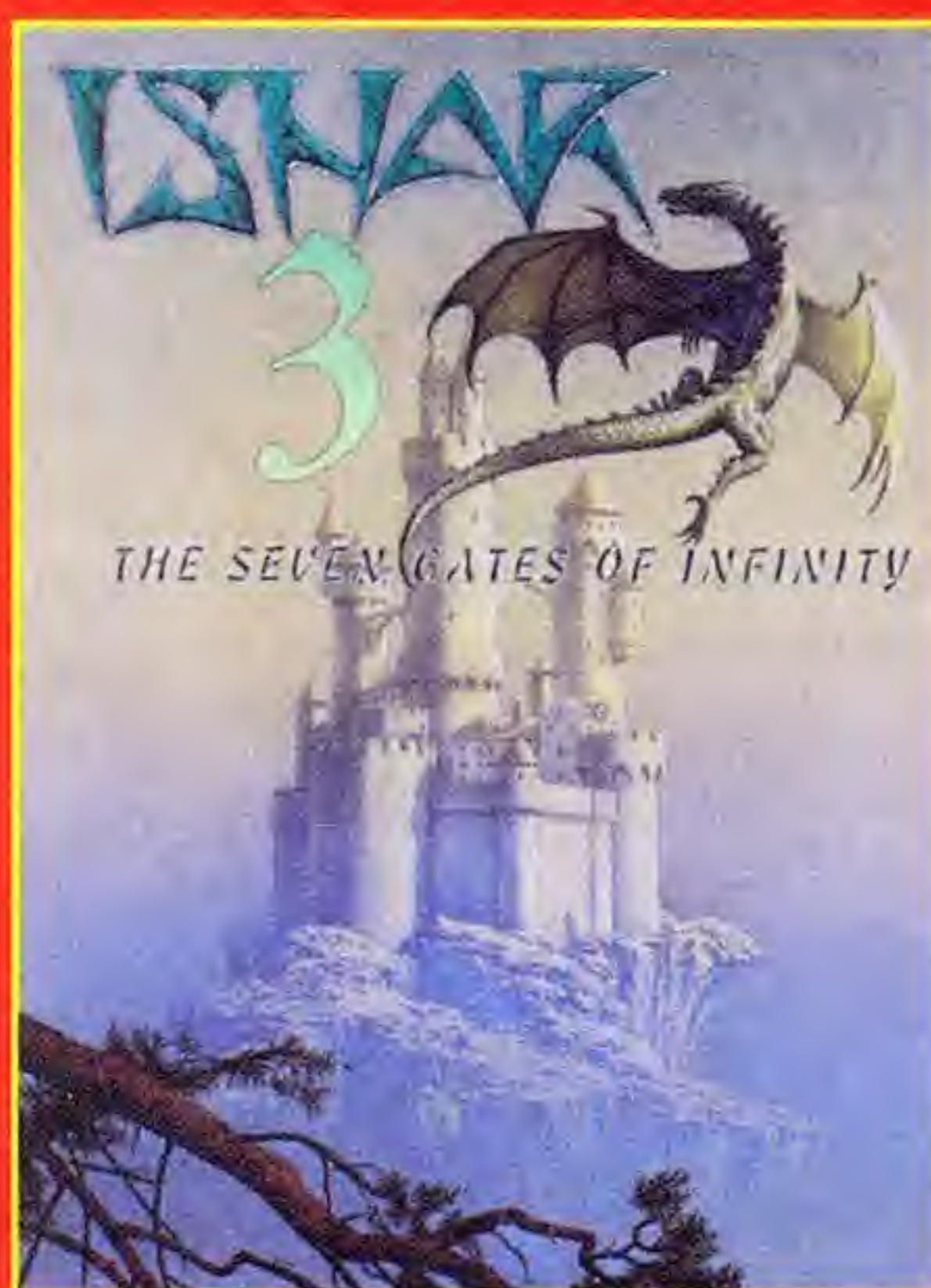
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ST ACTION

Experience the massive world of Ishar 3 in Silmarils' final installment of their popular computer RPG game

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on sale
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The CoverDisk



This month we have a demo of Art for Kids, a paint package specially designed for children. Featuring colourful graphics and great sampled sound effects, it should keep the little 'uns occupied for ages

PLUS:

- **Combat** – A frantic and fast paced Operation Wolf-type action game
- **TOS patches** – A selection of programs to cure many bugs
- **Fonts** – More great quality fonts in Calamus and PostScript format
- **And much more**

The DISK starts on page 12

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Jaguar injects new life

With the announcement of their financial results, it would appear that Atari is finally pulling out of its monetary nose dive. The second quarter results show the Net Sales increasing by 43 per cent to \$8.2 million as opposed to the second quarter of 1993 of \$5.7 million.

The increase in sales is mainly attributable to the sales of the Jaguar. On the downside, the company has incurred an Operating Loss of \$3.9 million, slightly lower than last year's \$4 million.

These exchange gains and losses together with other income and expense items resulted in a Net Loss of \$3.4 million for the second

by Adam Phillips

quarter of 1994 as compared to a Net Loss of \$6.6 million for the same period of 1993. Atari hope to be in the black by the first quarter of next year.

Commenting on the report and the future, Sam Tramiel stated: "We are focusing our efforts on having between ourselves and third-party publishers 30 to 50 titles available for the Jaguar during the Christmas selling season."



Jaguar: 30 to 50 titles available by Christmas, including the much vaunted and delayed Aliens Vs Predator

Atari's marketing move

Atari have hired Edelman Public Relations Worldwide to help market the Jaguar on an international basis.

Edelman PR is the sixth largest public relations firm in the world. Some of its other famous customers include Toys'R'Us, The Ford Motor Company and many others.

"To succeed in the video game business you need great hardware, great software and great marketing," said Sam Tramiel, president of the Atari Corporation.

"We now have an award-winning international public relations team on board to make this the year of the Jaguar."



Tramiel: "To succeed in the video games business you need great hardware, great software and great marketing."

Internet opened up

With the super information highway starting to take shape, CompuServe have begun the testing of a new service that allows members to participate in discussions on USENET.

This access should allow the user to enter thousands of discussion groups on a huge variety of differing subjects.

Once testing has been completed, CompuServe members will be able to read and contribute to the USENET News groups.

"CompuServe recognises our members want to augment the wide array of products and services available on CompuServe by expanding their information horizons on the Internet as well," said Charla Beaverson, Internet project manager at CompuServe.

Also recently introduced is the online support directory.

According to CompuServe, with over 800 hardware and software companies available for consultation about anything from a printer and hard drive to a monitor and cable, the service provides a comprehensive and useful database.

"Support Directory makes it very easy for members to get help with their hardware and software problems and make informed buying decisions," said Jim Hogan, director of product marketing.

For more information, contact CompuServe on 0800 289378.

Apology

Apologies to System Solutions for the incorrect product box accompanying the review of their MF-5315 monitor in last month's issue. Here are the correct details.

BOTTOM LINE

FEATURES

The extensive image controls mean you're not stuck with factory settings

Excellent
Good
Average
Bad
Appalling

EASE OF USE

Being an auto-scan monitor it changes frequencies as you change resolutions

Excellent
Good
Average
Bad
Appalling

VALUE FOR MONEY

You'd be hard pressed to find anything cheaper with similar specifications

Excellent
Good
Average
Bad
Appalling

Product: MF-5315 15" monitor

Supplier: System Solutions, Windsor Business Centre, Vansittart Road, Windsor SL4 1SE

Telephone: 0753 832212

Price: £399

Configuration: TT/Falcon (requires VGA adapter)

News briefs

FAST retirement

The Federation Against Software Theft has announced that its chief executive, Bob Hay, is retiring after nine years of service. He leaves to spend time with his wife who has been seriously ill over the last several months.

David Svendsen, board chairman of FAST and managing director of Microsoft Ltd, added: "To many in our industry, Bob has been the public face of FAST and everyone will miss his single-minded goal of establishing a moral and legal environment in which to use software."

Svendsen concluded by saying: "Under his leadership, Bob has taken FAST from inception to the most successful anti-piracy body in the world."

★ ★ ★

Bulletin boards made easy

To combat the tedium of BBS login screens, a group of Sysops 'system operators' have decided to create MAXlink, a networking bulletin board. The idea behind the scheme is once a user has joined and all their details have been taken, the data is passed on to all the other MAXlink BBS.

This in turn provides instant membership to all the bulletin boards under the MAXlink banner and saves the user time and money.

★ ★ ★

Death in the family

With the Jaguar readying itself to face stiff competition in the oncoming months, Jay Miner, a key figure in Atari's history, passed away on June 20 in California. His lifelong kidney problems finally took his life.

Jay had a long and accomplished career. He helped design the Atari VCS games console and his later achievements included the Atari Lynx, an underrated handheld that today, in terms of technological excellence, outshines its portable counterparts in the market place.

★ ★ ★

Multi-platforms

With 166 exhibitions under their belt, the All Formats Computer Fairs are continuing their regular tours round the country. Covering the latest in ST, Amiga, PC, shareware, games and even 8-bit products, a full rundown of shows can be obtained from Bruce Everiss on 0608 662212.

★ ★ ★

Oops

The number printed for the Falcon Fact File in last month's news was unfortunately wrong. Instead, dial 0205 356867. Alternatively, prospective members can send a SAE to FFF at 11 Pound Meadow, The Green, Whitchurch RG28 7LG.

Crime unit cracks down on porn pirates

Following the recent discovery of pirated CD software valued at £10 million, ELSPA's crime unit, headed by John Loader, has recovered over 200 CD-ROM discs and writing equipment from two addresses in Manchester.

The software, worth £500,000, has been examined by both ELSPA investigators and the Greater Manchester Obscene Publications Department.

"Not only does illegal activity pose an enormous threat to the commercial interests of the UK's legitimate computer games software industry" stated Loader, "but it highlights the increasing problem of production and distribution of illegal, pornographic software throughout the UK."

If you have any information that should receive the attention of the crime unit, phone John Loader in confidence on 0386 833810.



Pornography:
ELSPA's crime
unit scores
another success



Acclaim: Developers of the violent Mortal Kombat have climbed aboard ELSPA's rating scheme

Full house

After the somewhat troubled start of the European Leisure Software Publishers' Association's [ELSPA] ratings system, the group has announced that all 63 members of the association have given their full support and adopted the scheme.

This includes Acclaim, publishers of the controversial Mortal Kombat, who, after much publicised deliberation, have agreed to carry the ELSPA age suitability ratings.

NameNet offers help with telephone changes

With the new telephone numbering system introduced in the United Kingdom on August 1st, NameNet, the latest version of Roger Derry's Address Manager, is fully equipped to handle the new change.

Most geographical codes merely have a 1 added to their trunk dialling code. Five cities will have their National Numbering Code completely changed. Non Geographical codes like 0800, 0345 and various mobile phone numbers will remain unchanged.

NameNet 3 is supplied with a data file that allows existing NameNet databases to automatically convert to the new system, claim the makers.

Another innovation happening later this year is the introduction nationally of caller identity services. This allows the receiver of a call to tell which number is calling them even before the phone is answered.

People who, for example, have ex-directory numbers or use a different line for outgoing calls may wish to suppress this information. NameNet 3 can apparently be set automatically to add suppression code on a global or per-entry basis.

The Professional version is available from

System Solutions on 0753 832212 and costs £39.95. Users wishing to upgrade (by sending in their master disk) or receive a shareware version should contact Roger Derry at 38 Leopold Road, Bristol BS6 5BS.

Diary Dates

September 20-25, 1994

Live '94

Venue: Earls Court

Organiser: News International
(071-782 6893)

Players in the electronic entertainment industry have pledged their support for this large consumer electronics show.

October 6-9, 1994

BBC Big Bash

Venue: NEC, Birmingham

Organiser: Haymarket Exhibitions

The Future World area of this big show will contain the latest computer games and virtual reality.



SENSIBLE SOCCER 10.99 **CHAOS STRIKES BACK** 3.99 **S.O. MONKEY ISLAND** 9.99 **LEMMINGS 2** 9.99 **CANNON FODDER** 20.99 **ISHAR 2** 8.99



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D/S = requires double sided disk drive
• = NEW item

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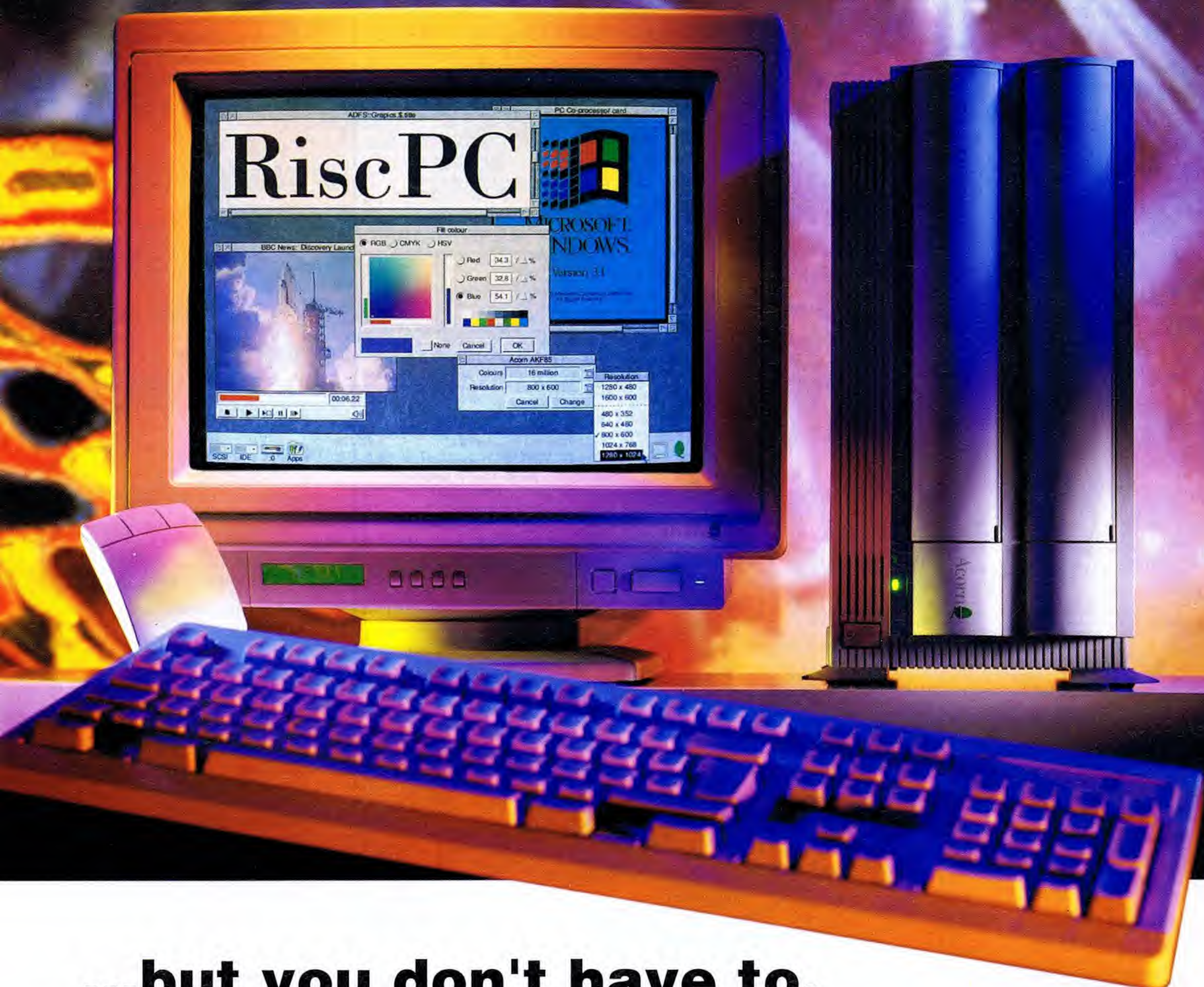
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Euro News

Things are getting better for Atari Users with news of a faster hardware accelerator and more CD-Roms, according to our man across the water, Don Maple



The need for speed

THE Speed Resolution Card is a new type of hardware accelerator for the Falcon which increases the clock speed to the processor and speeds up the whole internal Falcon bus.

This results in a variable increase in speed of all peripheral chips on the motherboard which can be set in six discrete steps. For compatibility reasons the card can also run the whole system at its original speed.

Installing the card is relatively complicated as it involves opening the Falcon and soldering several wires directly onto the motherboard. This should not be done by the faint of heart and, if in doubt, should be left to the professionals.

The installed card sits under the internal hard drive which gets new mounting braces. A cooling element for the graphic chip runs hotter due to the higher speed.

Once the card is installed, one of the three initial boot clock rates is set in hardware. The three settings are: 32/16MHz CPU & 16MHz bus, 36/18MHz CPU and 18MHz bus, and 40/20MHz and 20MHz bus. Regardless of which boot speed is set, the supplied accessory can be used to switch among various speeds later.

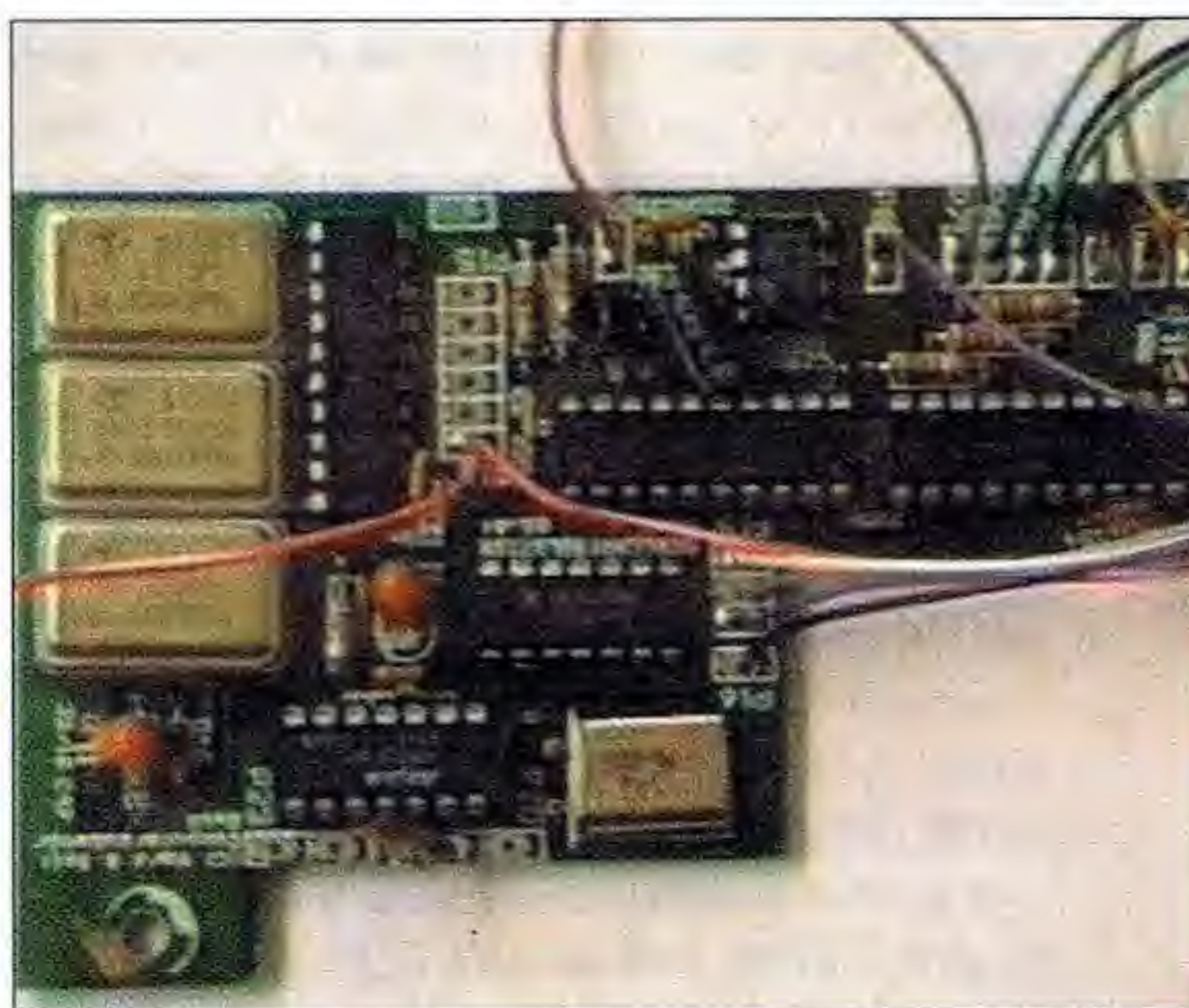
The Falcon runs without problems with a Speed Resolution Card, with the exception of the highest speed 40/20MHz. In this case, some third party hardware add-ons and some Falcons may experience timing problems. This is because not all Falcons are created equal and some use parts with different tolerances.

If True Color is selected, the DSP may experience problems due to large amounts of data. Some Falcons may experience SCSI difficulties at

40 MHz. In addition to the maximum 40 MHz CPU speed the coprocessor can be run at 32/50 MHz. The rate supplied to the graphic chip comes from a variable clock generator ranging from 20 to 80 MHz. Some of the new graphic modes are: mono 1024 x 768 at 70 Hz, 16-colour 1006 x 700 at 70 Hz, 256-colour 800 x 600 at 70 Hz and TrueColor 672 x 512 at 100 Hz interlaced.

The software speed switch provides the following rates for CPU/bus respectively: 16/16MHz (the original speed of the Falcon), 32/16, 18/18, 36/18, 20/20 and 40/20MHz.

In Germany the card costs DM350 (about £150) and is available from Hard & Soft, Obere Muensterstr. 33-35, 44575 Castrop-Rauxel, Germany.



Attach this to your Falcon and you're flying



● AS CD-Rom drives become more common among Atari users, so does the number of available CDs. Here are a couple of the latest.

Astronomy Software Service CD-Rom is a multi-format CD with a collection of shareware and PD programs, data and pictures about astronomy. The programs are for the Atari and DOS (including Windows and OS/2).

Almost all programs run directly from the CD and include applications for all aspects of observation of heavenly bodies. There are programs for calculations of orbits and trajectories as well as image processing of those less than perfect space photographs.

The CD also contains some sources and demos of commercial products, the latest NASA images such as that from the Hubble space telescope and the Shoemaker-Levy fireworks, as well as numerous star charts.

The CD can be had for DM98 (about £40) from Daniel Roth, Bruecker Mausepfad 448, 51109 Cologne, Germany.

● THE other CD is for music fans as it contains 500Mb of MOD files. These can be played back at between four and 24 channels.

This CD is a non-profit undertaking and the more people order it the cheaper it will get, but it is expected to be around DM40 (about £15) plus postage. For more info write to Stephan Bold, Paray-le-Monialstr. 16, 67098 Bad Duerkheim, Germany.

● A NEW German Atari magazine is about to be launched. Called "Atari Intern" it's expected to hit newsstands throughout Germany in September.

For more information write to Hard+Softwareversand Falke, Ruehrbrook 10, 24226 Heikendorf, Germany.

Any comments?

COMMENT is a very handy desktop utility. Once installed it allows the user to attach text comments to icons. Double-clicking on an icon with the Alternate key down brings up the comment while double-click and left shift invokes a "picture comment". Using control with a double-click on any icon shows the list of available comments.

The program also provides the "install application" feature of the desktop but with a difference. Several different extensions can be assigned to the same program or vice versa – several

programs assigned to the same extension.

In the latter case, an additional choice must be made as to which of the defined programs should actually run and load the clicked file. Comment also has a number of other features and is available as a demo limited to 20 comments. The full registered version costs only DM20 (about £8 – make it an even ten!) and can be had by sending the money and a formatted disk in a self-addressed envelope to Peter Aschbacher, Pfeiferg. 8, 5020 Salzburg, Austria.





This month we've got part two of our great font giveaway, two spectacular games and an amazing STE-only demo of the hottest "edutainment" package around, Art For Kids

disk
RE
V
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C



Flattering,
I'm sure...

Art for kids

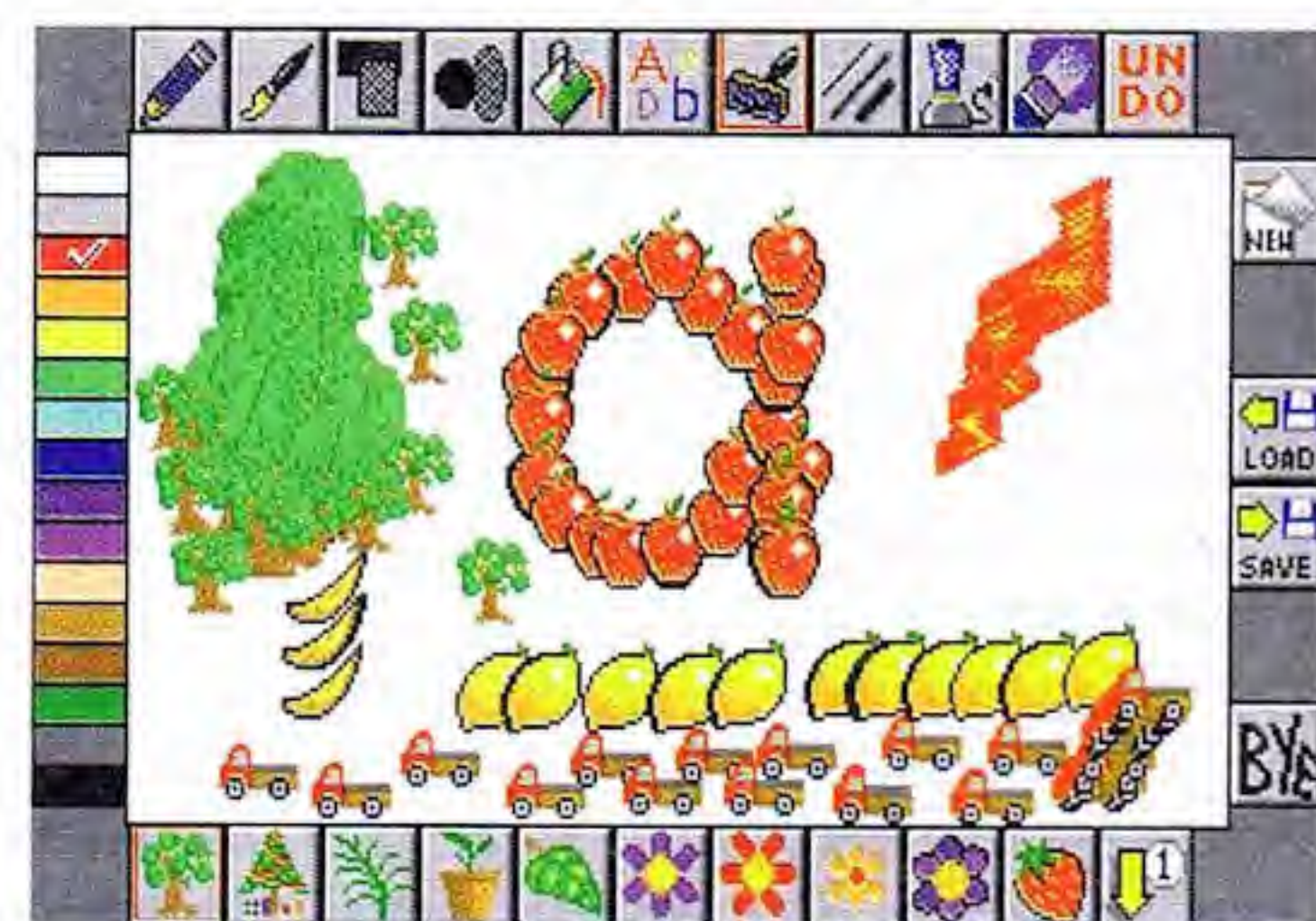
Art For Kids is a stunning art package aimed at the younger generation but with sampled sounds for each tool and some wacky special effects you're unlikely to see in other programs, it's sure to appeal to any age group.

Some of the special effects and tools have been disabled and you can't save or print your work, but the main aim of Art For Kids is interactive painting rather than creating pictures for posterity, so you can still get a lot of fun out of this well-crafted program.

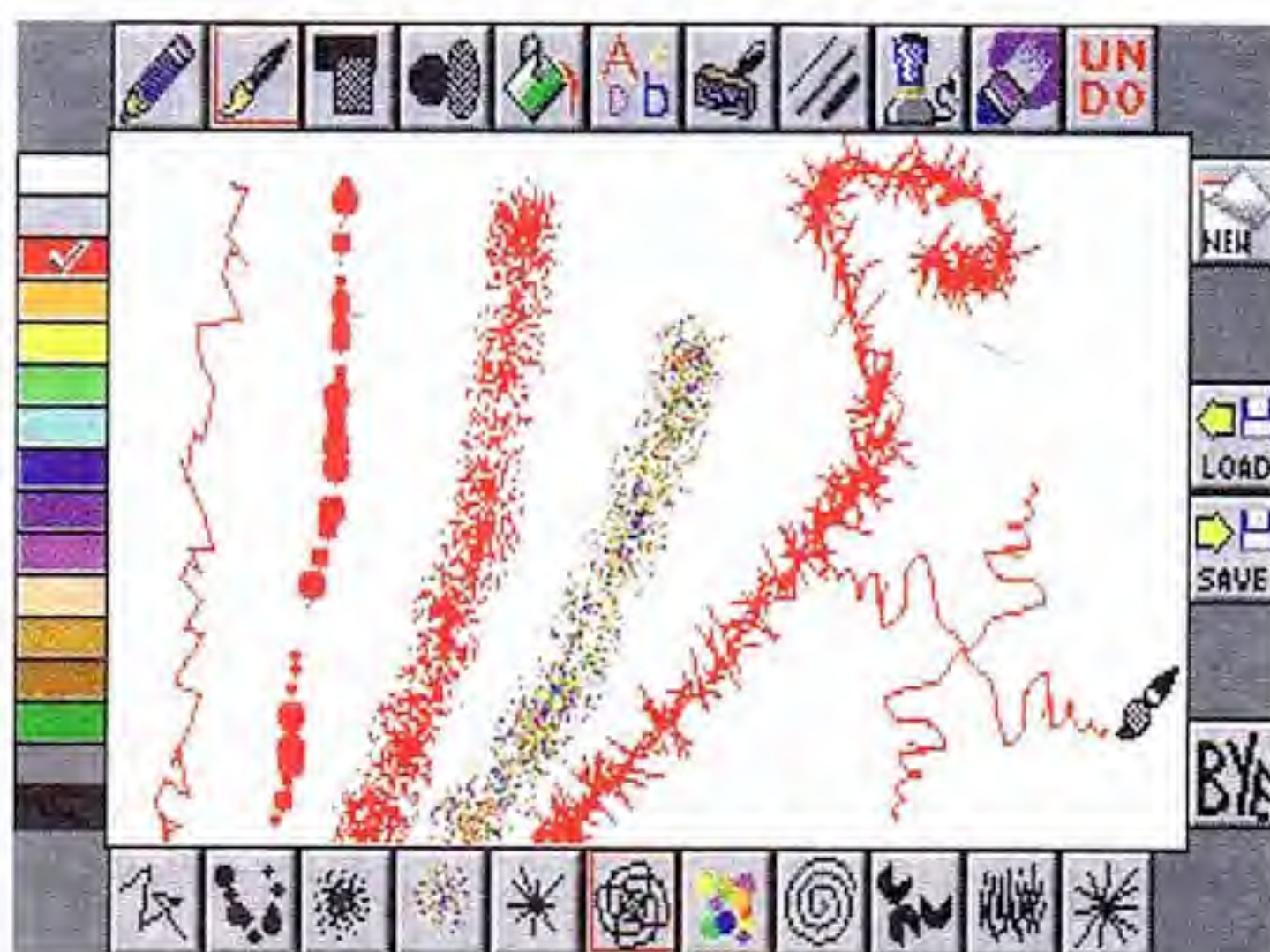
The demo is best run from a hard disk but will work fine running from floppy, albeit a little slower as it accesses each new paint tool from the disk. If you have 2Mb or more of memory, it will run much faster if the program files are copied to a 1Mb RAM disk.

The most important thing to know is that when copying the program elsewhere you must retain the directory structure. In other words the Art For Kids data files must remain in the folder called SYSTEM.AFK while the program itself remains in the root directory. Our brand new CoverDisk extraction program

A superb graphics package demo for kids that features some stunning art effects and sampled sound



The stamps can be used in many ways



Art For Kids includes some interesting tools

will automatically create the appropriate directory on your blank floppy disk.

When you run the program, you will see a 16-colour palette to the left, several command icons on the right and toolboxes at the top and bottom. If you select a different tool from the top row, the bottom changes to reflect the sub-options available. Only the six sub-options on the left of each row are available, but this will give you and your youngsters plenty of opportunities to be creative.

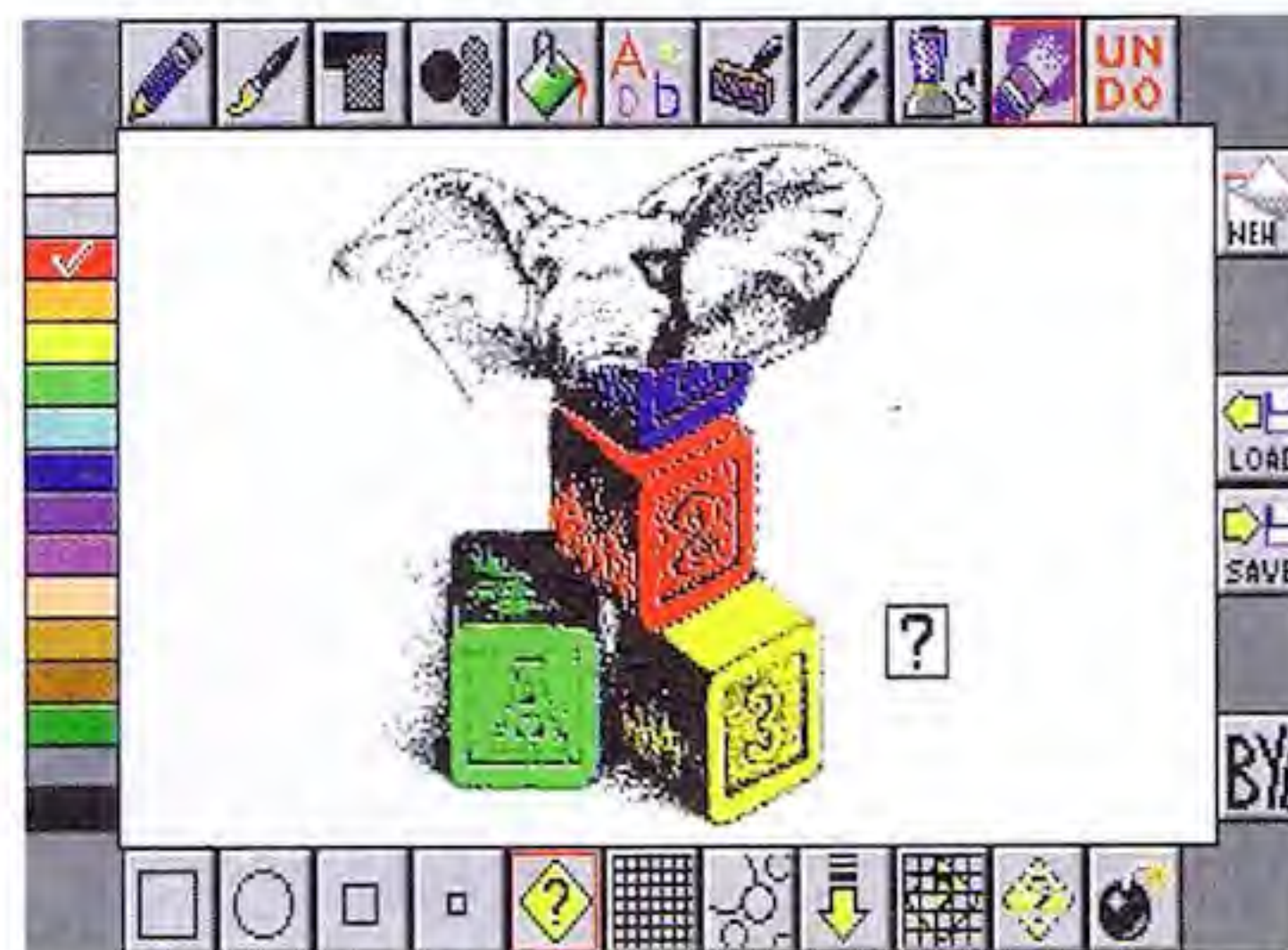
Best of the bunch are the brush tools. The first sub-option is Scribble, a freehand drawing tool that converts smooth mouse movements into jerky lines. Next comes Dri - ideal for messy children - followed closely by the more traditional spraycan and the multicoloured Sprinkles. The Spikes option, fifth from the left, produces a shattered glass effect while the

What's on the disk

Program	By	Configuration	File/s	Disk space needed to extract
Art For Kids	Tony Barker	STE, 1Mb, low res	X_ARTKID.TOS	525813
Calamus fonts	Advanced Graphics	Any Atari	X_CFN.TOS	85956
PostScript fonts	Advanced Graphics	Any Atari	X_AFMPFB.TOS	91795
Combat	Lee Briggs	Any ST/STE, low res	X_COMBAT.TOS	332605
Violent Death	Colin Watt	Any ST/STE, low res	X_DEATH.TOS	98604
FP Print	Frank Pawlowski	Any ST/STE	X_PRINT.TOS	2735
What Is 6.7	Bill Aycock	Any ST/STE	X_WHATIS.TOS	42953
TOS patches	Various	Most ST/STEs	X_PATCH.TOS	-

sixth is a Kaleidoscope or four-way, real-time mirror. As you move the mouse, the same freehand line is drawn in four different directions. The stamp tool is well worth investigating and the blender option conceals some really whacky effects. Each tool has a superb sampled sound to go with it too, so it's bound to keep the children entertained for hours!

An enhanced version of Art For Kids is available for the TT and Falcon. Full details of where to get the program, along with a complete manual and the full range of special effects are included in our exclusive review later in the magazine.



Try rubbing in a picture if you can't paint

Fonts

We don't mess around at ST User! Last month we gave away three commercial quality fonts in both Calamus and PostScript formats for those of you who are involved in desktop publishing or word processing.

A smart, stylish font can make all the difference to your documents, so we plan to add to your collection again next month with the final three fonts, giving you two complete families, including three fonts from the Optical family (similar to Optima) and five from the Award family (similar to Souvenir).

Optical is a modified sans serif font suitable for both headings and body text, while Award is a modern, friendly looking serif font that can be used for body text. The heavier weights can also be used for headings.

The fonts are provided in both Calamus and PostScript formats. The Calamus format fonts can be used in all versions of Calamus from 1.09 to SL, DA's Vector and DA's Layout/Didot Professional.

Alternatively they can be converted to That's Write format using CFont or to GDOS format (for Timeworks and similar programs) using the ST Club's excellent Fontkit Plus 4. The PostScript format fonts are for use with Pagestream.

Both formats can be edited and altered with the ST Club's useful Fonty utility. One or two non-essential characters are missing but there's a full set of alpha-numeric characters and the widely used punctuation marks. The fonts are in two separate

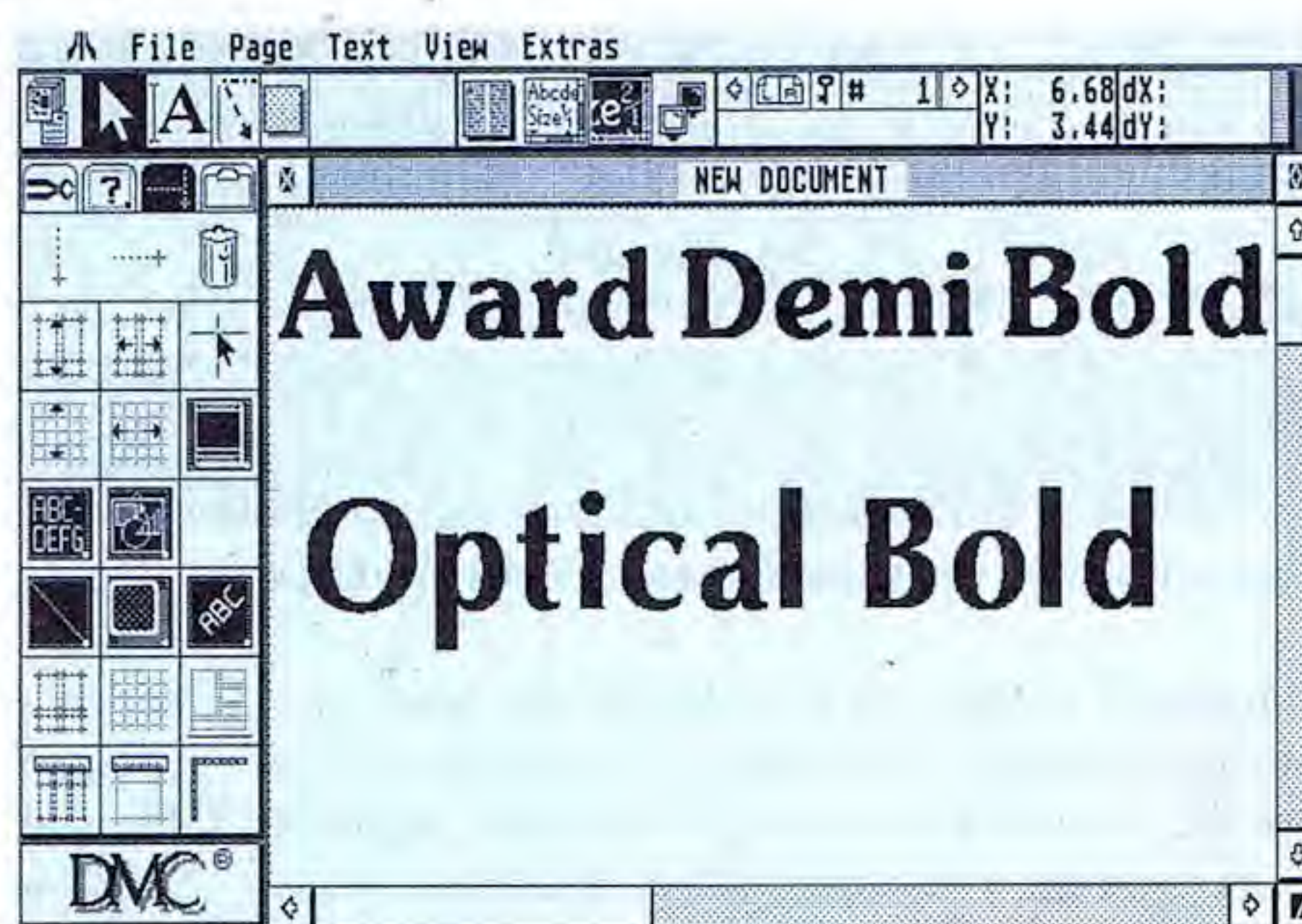
Two more high grade fonts in both Calamus and PostScript formats

archives – simply choose X_CFN.TOS for Calamus fonts and X_AFMPFB.TOS for the PostScript versions.

This month we've provided Award Demi Bold and Optical Bold. Next month we will be giving away Award Bold, Award Light Italic and Optical Plain and showing you just how to use the fonts for maximum effect.

Plenty of other good quality fonts are on offer from Advanced Graphics Ltd of 14 Lyefield Avenue, Wigan, Greater Manchester WN1 3UL or telephone 0942 498174.

Pack prices start from £15 for a pack of 20 fonts in either format.



This month's fonts in Calamus 1.09

Using the CoverDisk

First things first. Write-protect your CoverDisk now by sliding the write protect tab, inside the small hole in one corner of the disk, so that you can actually see through the hole. Your data is now safe from accidental erasure.

In order to fill the disk with as many programs as possible, ST User employs disk compression techniques for the vast majority of the software. These files are called "archived" files and contain all the files relevant to a particular program squashed together into a single file using the LZH compression algorithm.

These archives are identified by having a name beginning with X_ and are actually self-extracting files. In other words a small program is attached to automatically extract them into their original form.

In the past, we expected you to copy the archives to blank disks and run the self-extracting programs – now we have a different method. Simply double click on the program file EXTRACT.TOS and follow the instructions!



The CoverDisk extraction program in operation

The extraction program will present you with a menu of all the archived files on the disk. Using the cursor keys, make sure the black bar highlights the archive you want and press Return. After the file has been copied into memory, you will be asked to remove the source disk (the CoverDisk) and put a new disk in.

The good thing about this program is that you can use whatever disks are handy. It will format brand new disks, reformat dodgy ones that you're not sure about or use space on half-filled ones. Just follow the program's instructions for the easiest CoverDisk ride you've ever had!

You will still need a formatting utility to make a backup of the CoverDisk because ST User has a rather unusual disk format to make more space. In fact it has 80 tracks and 10 sectors, so you'll need a program like Fastcopy 3 which can make direct copies or a formatting utility to format a similar disk and then file copy the archives and extraction program across.

If a fault turns up...

With thousands of disks being duplicated each month, a few will inevitably be faulty. Fortunately we can help you. Send the faulty disk to:

PC Wise, Dowlais Top Business Park, Merthyr Tydfil, Mid Glamorgan, CF48 2YY

A replacement will be sent back free of charge but please allow 28 days for delivery.

Remember, the CoverDisk hotline is no longer available – with our easy to use extraction program there should be little need provided you are familiar with the basics of using your ST. On the other hand, if you do have an enquiry or a complaint, write to Atari ST User Customer Services, Europress Publications, Europa House, Adlington Park, Macclesfield SK10 4NP. Play fair with shareware

If it wasn't for some very talented shareware authors, the ST scene would be a lot duller. So, a big round of applause goes out to the authors of these great shareware games and utilities.

If you would like to see more shareware programs for the ST, be sure to support these people and send off the suggested registration fee. You know it makes sense.

Combat

Combat is a shooting game in the tradition of classics like Operation Wolf. It consists of three complete levels of rapid fire arcade action. As well as your colour monitor or TV-equipped ST, you need quick reactions and finely tuned sharpshooting skills.

Once the program has been de-archived, you can double-click on LOADER.PRG in either low or medium resolution or reset the

Blast away the enemy infantry and tanks with this superb shoot-'em-up

computer, in which case the game will auto-boot.

Your mission is to protect the free world's oil supply which is under threat from a missile site designed to attack passing tankers near the

Straits of Hormuz. Your mission is to parachute into open desert, fight your way over a river crossing and take over an enemy army base. From there you should be able to shoot down the missiles as they pass overhead.

You are armed with a 20mm automatic rifle with attached grenade launcher and protected by an armoured suit which will withstand a good number of hits.

Extra supplies of ammo and grenades can be obtained by shooting the supply crates which are parachuted down to you along with a few first aid kits to help you survive.

To fire at the baddies, use the mouse to aim the on-screen cross hairs. The left button fires bullets while the right button launches grenades.

You can take out several enemy vehicles with one grenade if they're grouped together – along with any dumb soldiers who happen to be nearby – but if you run out, you can always turn your rifle on the tanks too. It's one mean rifle!

Combat is a shareware game so if you like it be sure to send a fiver to the address in the README file. The archive also includes a demo of another game called Planetfall, which is available to all those who register.



Get ready for armed Combat!

Violent Death

More murder and mayhem as you navigate your fragile space fighter in this horizontal scrolling shoot-'em-up

Violent Death is a smoothly scrolling, horizontal shoot-'em-up in the tradition of classics like Nemesis and Scramble. It can be played by one or two players simultaneously and was written in STOS Basic using the Misty and Missing Link extensions.

Once the game has been de-archived onto a floppy disk, double-click on the file named DEATH.PRG.

When the game has loaded you will see a menu screen with two options, Start and one player. To choose the two-player option move the joystick up or down to highlight 1 Player and then move the joystick to one side to select the 2 Player option. Note that as the game is joystick controlled you will need two joysticks.

To start the game, highlight the option Start. A further option, Continue, becomes available if you manage to progress beyond the first level.

The spaceships are controlled using the joysticks in any direction and both are displayed on screen at once for maximum chaos!

The object of the game is to get through the fiendishly difficult caverns, shooting the



Dodge beasties and bullets to avoid a violent death

marauding enemy spacecraft and the fixed gun emplacements. Pressing fire engages the missile launcher which is deadly against other craft. Pressing the fire button and moving up or down simultaneously releases a

bomb. The bombs are especially useful against the gun batteries. At the top of the screen are the status panels for each player that show the score and the number of lives left. Good luck – you'll need it to get through!

What is?

An extremely useful utility that tells you all about those unidentified files you were wondering about

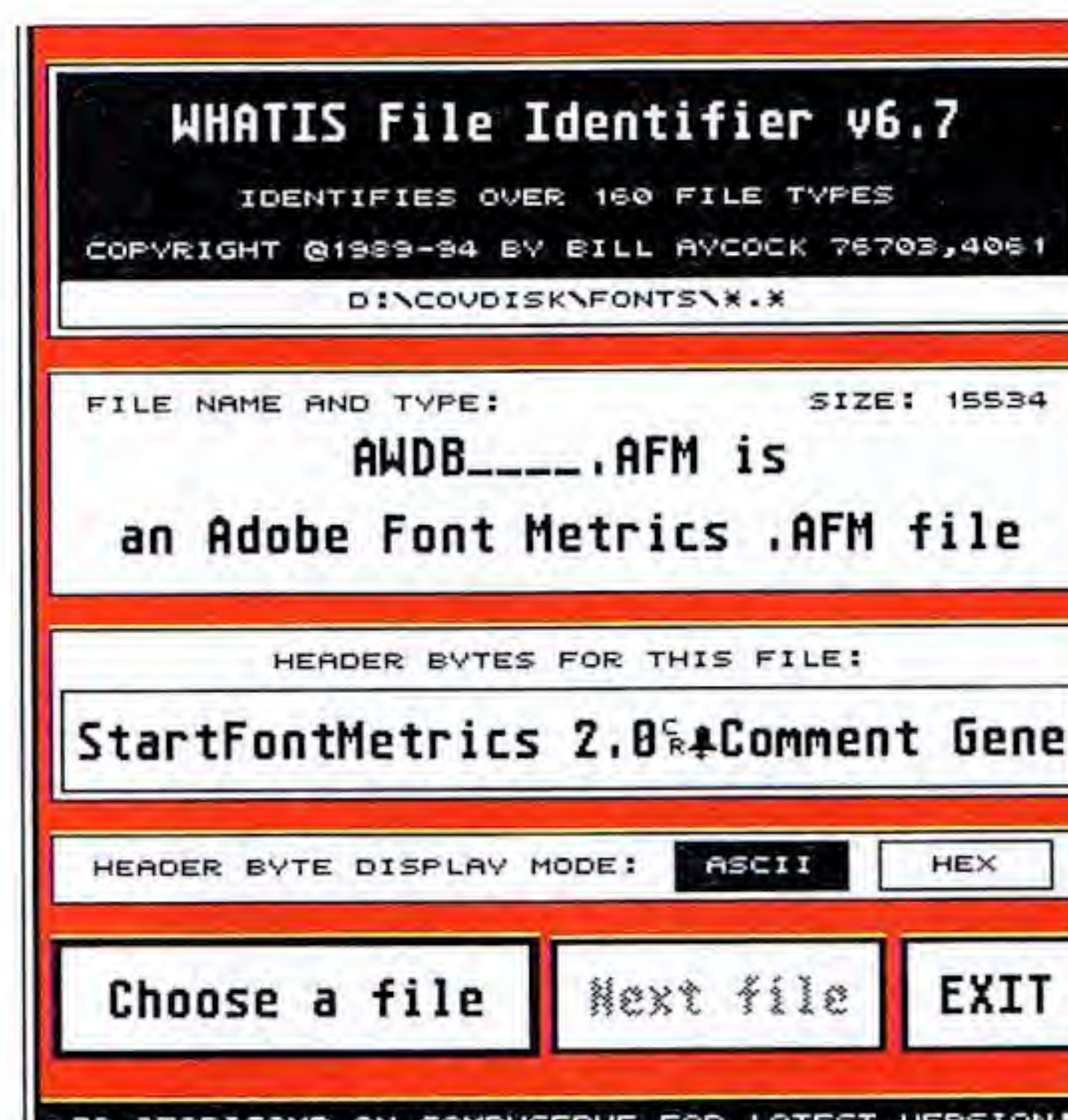
What is What Is? It's a simple utility that will identify over 160 different Atari file types, simply by looking at the header information and comparing what it sees with the information in its internal database. What Is? runs in any resolution and uses under 10k of the system's memory.

When the program and the lengthy text file have been extracted, simply double-click on WHATIS.PRG. Click on the box marked Choose a file and when the file selector appears, navigate your way to the file you want to identify. The result will be displayed in the large box under the title.

You can use it to identify files that you suspect have the wrong extension, no extension at all or which have been recovered from damaged disks using programs like KnifeST.

Among the files identified by the program are Midi, SNG, Notator and Cubase files, DTP documents such as Pagestream and Calamus files, word processor files from programs like Word Writer ST, Redacteur and even RTF files and various fonts from PostScript to Calamus and GDOS.

Among the more obscure files it recognises are five types of Prism Paint file, Magic Shadow Archives, DC Squished programs or accessories and even WordPerfect macros. You need never be in the dark about a file again!



What on earth is that? It's Bill Aycock's fine little utility

FPPRINT

Frank Pawlowski's famous freeware print speeding utility puts some umph back into your printer

FPPRINT is a very small AUTO folder program – only 287 bytes long! – that intercepts TOS's slow system print calls and replaces them with direct output routines. It takes up a tiny amount of RAM when it is installed and can speed up output from Timeworks, Pagestream and many other programs by a factor of two or three times.

Once extracted, the FPPRINT.PRG file should be copied straight into the AUTO folder of your boot disk. It works best with HP-compatible laser printers, though it can still speed up printing to non-page printers like Deskjets and Bubblejets quite considerably.

Once you've timed a printout or two, you won't want to be without it! The author's laser printer took 247 seconds to print a moderately complex page using Pagestream which was slashed to 70 seconds when a printer spooler was installed. Adding FPPRINT to the AUTO folder almost halved that time again to an astonishing 41 seconds!

Support is vital

If it wasn't for some very talented shareware authors, the ST games scene would be a lot duller. So, a big round of applause goes out to the authors/groups who support shareware.

If you would like to see more shareware games for the ST, be sure to support these people and send off the suggested registration fee. You now it makes sense.

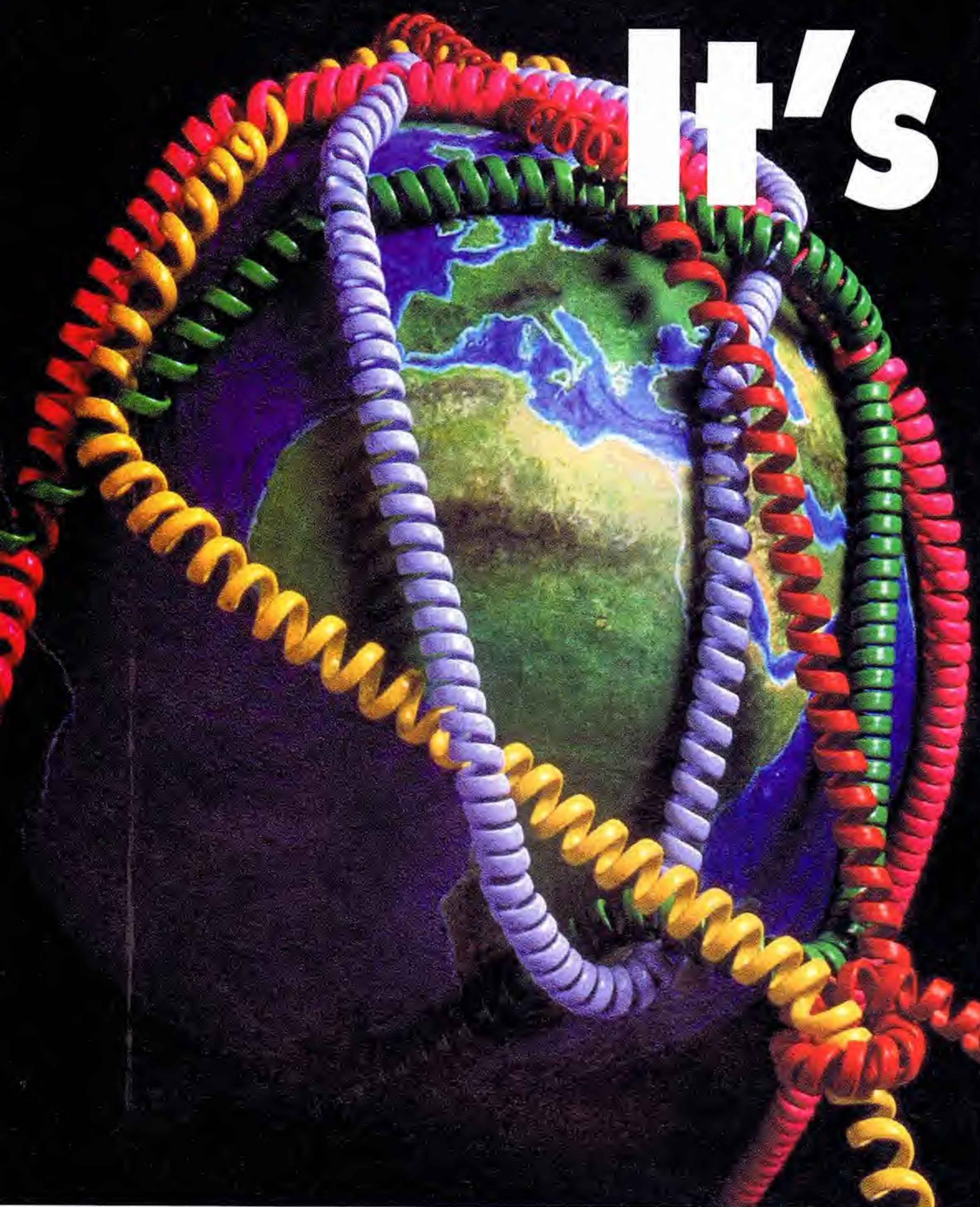
TOS Patches

A useful archive full of TOS patches, brought to you courtesy of Don Maple

Having problems communicating by modem? Keep getting error messages when you open folders? Infuriated by the scroll bar bug? These TOS patch programs will ensure you get the most from your system.

For full details about this, read the documentation accompanying all the individual programs and read Don Maple's comprehensive feature.

What is
the
answer?



It's elem

Our planet is getting smaller every day – much smaller! With a simple home computer and a relatively cheap modem, you can now connect yourself to the entire world – and the world can speak back to you.

Better still, since many computer systems are now attached to international networks, you don't even have to pay to phone outside the UK. One simple UK telephone call and the world is your oyster.

We've looked in detail at the necessary hardware in previous issues, but before you can do anything with that nice shiny new Sportster modem, you'll also need the right software to run on your Atari.

There is an amazingly wide range of commercial, shareware and public domain communications software available, so much so that it can be difficult for a newcomer to decide which of the plethora of features are actually going to be useful, and which are mere technobabble.

To be honest, there's a lot to be said for starting off with relatively basic software – such as a package like Dterm, which avoids all the complications of the more powerful programs and lets you get online straight away.

You can then look around for more suitable software, and download it directly as you get more confident.

Bulletin board bonanza

There are thousands of bulletin boards around the UK, mostly small back-bedroom operations with a single phone line linked to a small computer and a hard disk.

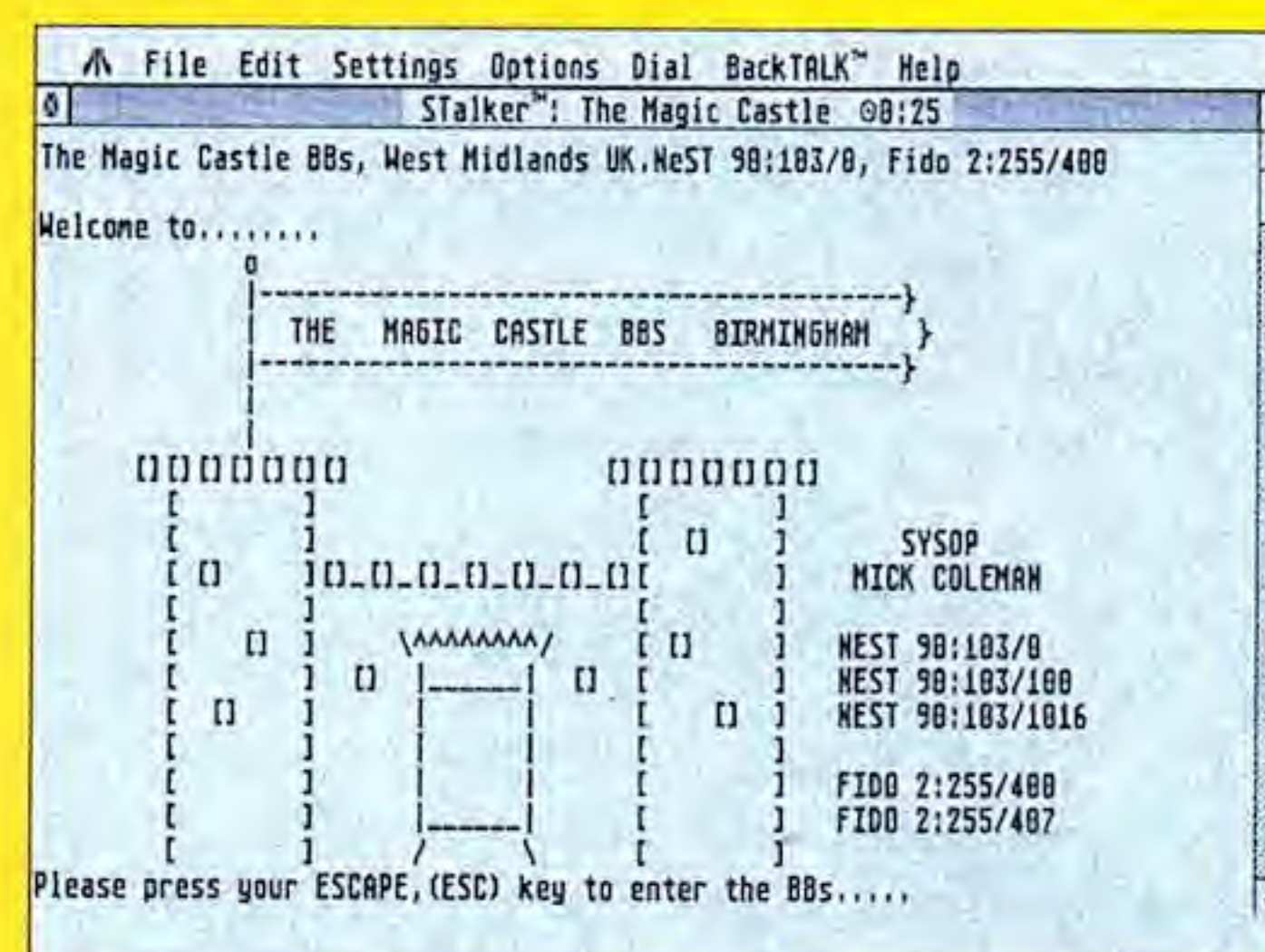
They are an ideal way to get into computer comms and are generally free to use (apart from the phone call). ST Users might like to try one of the NeST affiliated Bulletin Boards, run for and by

Atari enthusiasts. One big plus of the NeST system is that the boards are all networked, meaning that you can phone up your closest NeST BBS and any messages which you post will be passed to other NeST-affiliated boards around the world.

All of the boards listed here operate 24-hours a day, and support modem speeds of at least 9600 bps.

Bulletin Board	Modem number
Aspects	061-792-0260
Project: STARlight	0274 606670
QueST BBS	0422 381164
Magnum Hub	0274 547006
Magnum BBS	0274 547006
Desktop BBS	0782 541305
Ad.Lib	0913 702659
Atlantis-	081-715 5420
The Woking BBS	0483 715052
680+ BBS	0482 222303
The Tavern	081-445 6514
NeST Yate Hub	0454 881095
The Chameleon	0454 881095
My Little Phoney	0454 883624
NeST Midlands	021-430 3761

Bulletin Board	Modem number
The Crypt	0602 445307
The Dream Machine	0222 341713
The RainBow BBs	0782 304362
StarBase four	0691 671900
Folkestone QBBS	0303 249306
Fireball BBS	0932 850074
Night Hawk	0329 845384
STatic2 BBS	031-559 734
Pretty Hate Machine	0698 275601
STeelers BBS	0475 728430
Black Cat BBS	0222 711820
The Abbey/2	0202 873916
I'll Try That Once!	0453 765378
Penske BBS	0562 744858



Logging on to one of the NeST Bulletin Boards

entary

André Willey's beginner's guide to finding the right software for getting your Atari online

Many of the better communications packages are shareware, which means that although you are allowed to start using them for free, you are urged (indeed, required) to contribute towards their ongoing development by paying a small fee to the author.

CONSCIENCE

This system is obviously open to abuse since there is nothing – apart from your own conscience – to force you into paying, so many shareware authors limit the functionality of unregistered versions of their software in some way.

For example, CoNnect only allows you 30 hours of online time before you must register.

You can obtain comms software from a variety of sources, including PD libraries and magazine cover disks. If you decide to jump straight in at the deep end with a program like CoNnect, you can even pay your shareware registration

fee through Atari specialists System Solutions, from whom you'll receive the entire package, including a printed manual.

Although the online world is a fascinating place to explore, do remember that even a 'free' bulletin board costs you money every time you phone it up. Try to restrict your access to evenings and weekends, when you can take full advantage of BT's cheapest rates.

Also, look for Offline Reader programs, which allow you to keep the phone bills small by totally automating your online sessions.

Messages are downloaded to your own computer as fast as your modem can transfer them – which is usually a lot faster than you could read the text.

Then the OLR will hang up the phone and you can read the messages and create your replies, ready to be sent automatically next time you log on, or 'blink'.

Storm in a teacup?

Storm is the newest creation from 'Flash' author Alan Page, and it should be available for downloading from most ST bulletin boards. Unlike CoNnect, the generally available version of Storm is not restricted by time or by features. However, users who register by sending \$25 (about £16) to the author will receive updates as they are released.

Storm is a traditional terminal-oriented communications program. Terminal emulations and file transfer protocols are supported via external modules, so you don't need to waste memory on facilities that you don't currently require.

Although Zmodem is the most common file transfer standard these days (and X and Ymodem are also supported), some users might find other protocols, such as Kermit, useful. A custom font is used in order to provide 24 lines of 80 column text and a type-ahead buffer in the same window.

Storm's script language is a variation of Basic, with a good range of specialised commands to handle comms-specific tasks. There is no equivalent of CoNnect's useful 'auto-learn' facility to generate login scripts, but a pre-written script program is provided which can do much the same task.

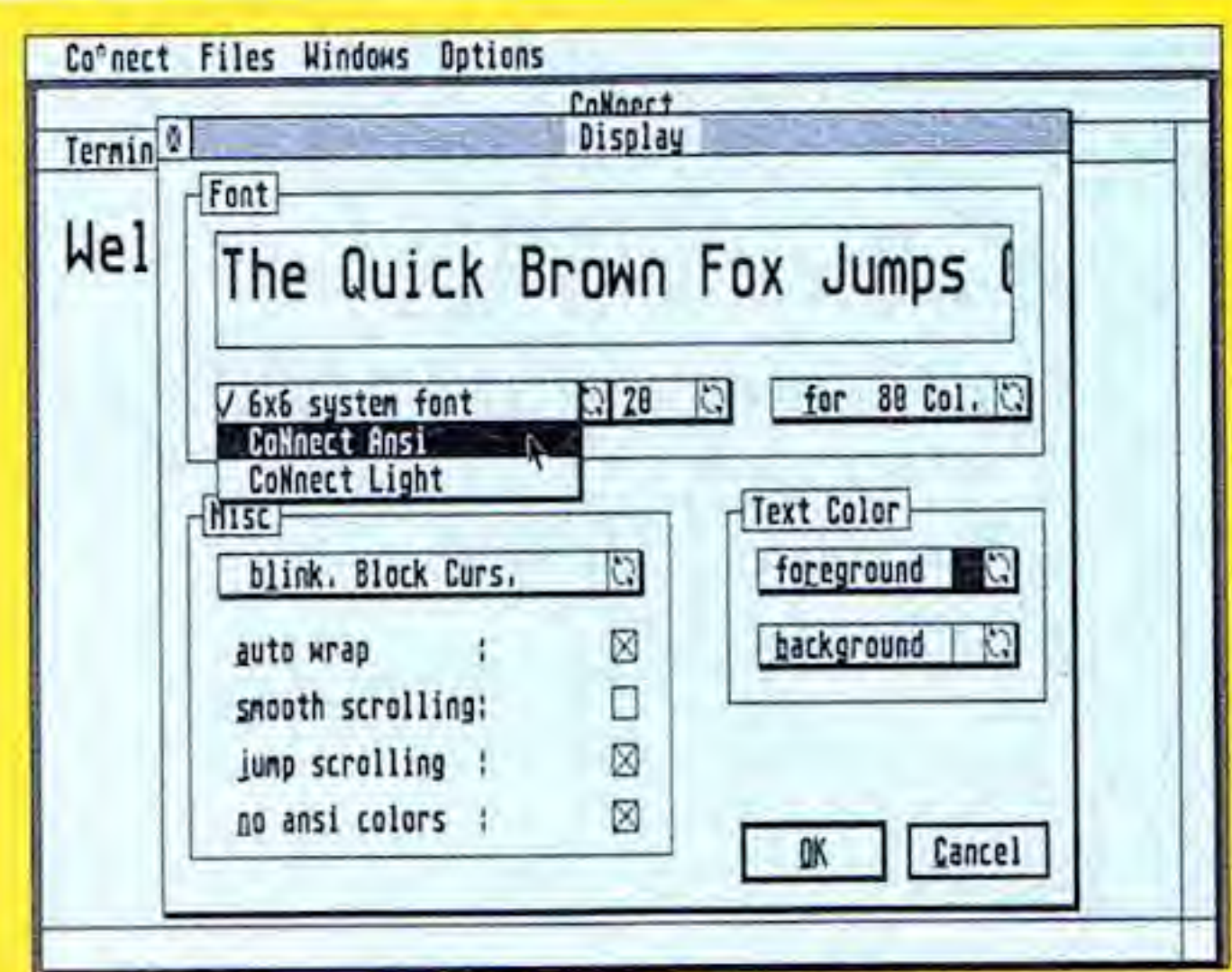
Storm Basic, which is an extension of the old Flash script language, is interpreted rather than compiled. This means that scripts can be edited and adjusted quickly, and re-run.

As with the capture log editor/viewer, Basic programs are edited in their own re-sizeable window, available even when online tasks are taking place. Oddly though, the main terminal window is not re-sizeable.

Falcon, Mega-STE and TT owners with fast modems will be disappointed to find that Storm doesn't support baud rates beyond 19,200. The same applies to the lack of multi-port sessions, a very advanced feature of CoNnect.

Storm will appeal to those who find the over-complexity of packages like CoNnect somewhat frightening. It is fairly straightforward to use, although perhaps a little limited in its range of supplied terminal emulations and file transfer protocols.

Hopefully, more of these will become available with future releases. It will certainly suffice to get you started in comms, and you may find that you're perfectly happy with it for some considerable time.



CoNnect supplies several special fonts, or you can install your own GDOS screen fonts if you like

The German CoNnection

CoNnect is a very sophisticated German communications program. Running entirely within windows – although you can eliminate the scrollbars to give a larger text area if you wish – it provides a very fast, but 100 per cent GEM, environment.

There is also an excellent online help facility which can guide you through the program without ever having to look at a manual.

CoNnect allows you to open several terminal windows simultaneously, and conduct separate online sessions in each – very useful on multi-port machines such as the Mega-STE, TT and Falcon. Each window has its own menu bar, letting you adjust comms settings separately for each session.

CoNnect has a useful selection of terminal emulations. In addition to the ubiquitous ANSI/VT100, it also supports VT102, VT200 and even the graphics facilities of TEK 4014.

DIALLER

This should mean there are few online services – apart from ancient Prestel systems – which CoNnect can't handle.

The dialler system is very flexible, allowing extensive configuration to support the special features of your modem, and almost uniquely providing a script learning facility to speed up logins.

The first time you log on to a system, CoNnect can be instructed to remember the correct responses for each online prompt, and can then replay them the next time you log on.

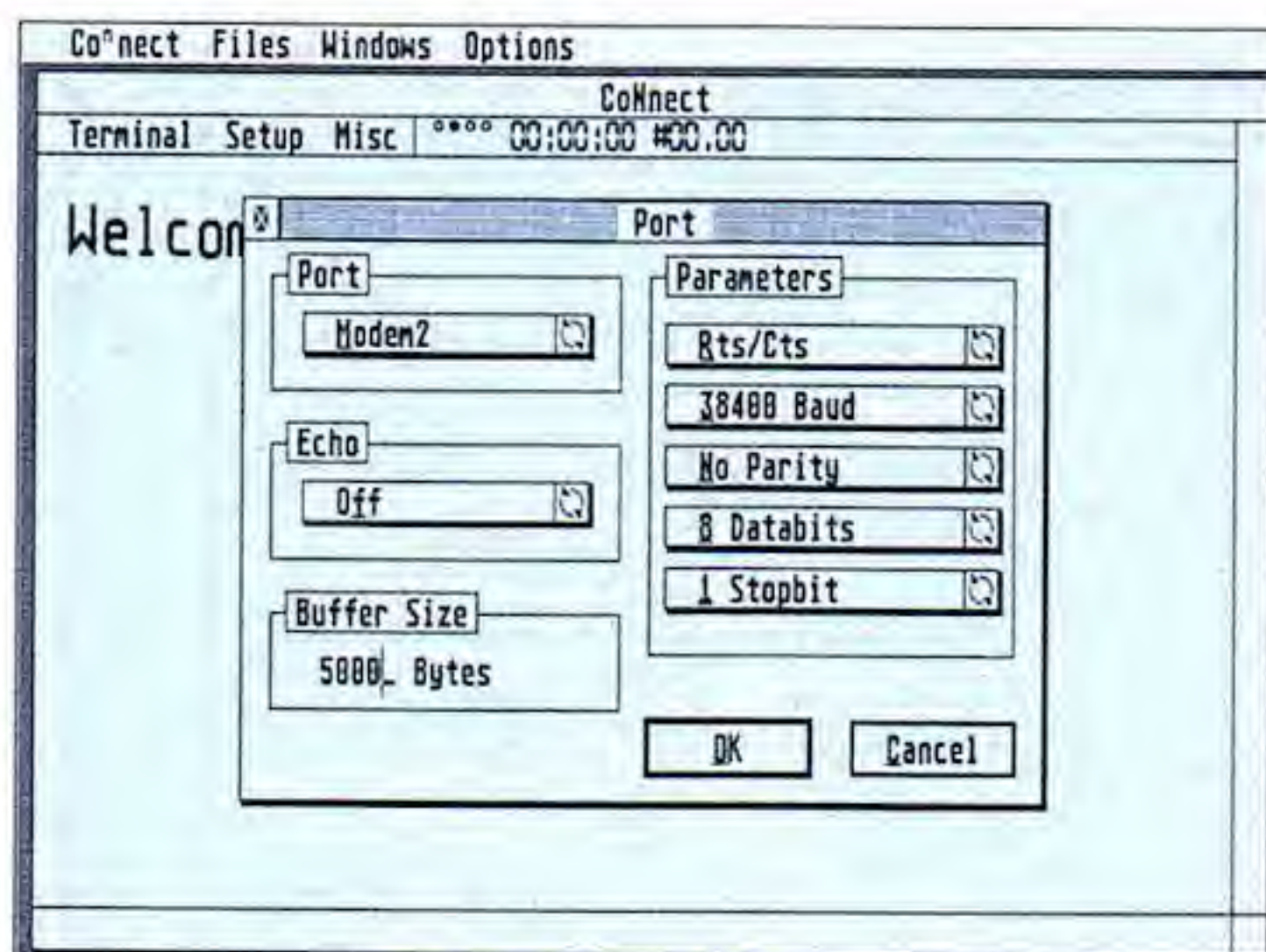
Like Storm, CoNnect is shareware. It is slightly more expensive at 60 Deutschmarks (about £25) but it's obvious that a lot of hard work has gone into the package. Indeed, it puts many more expensive commercial programs to shame.

The author allows you to try CoNnect out for 30 days before making a decision. If after that time you decide not to register, the software will assume you don't consider it worthwhile and will block further use.

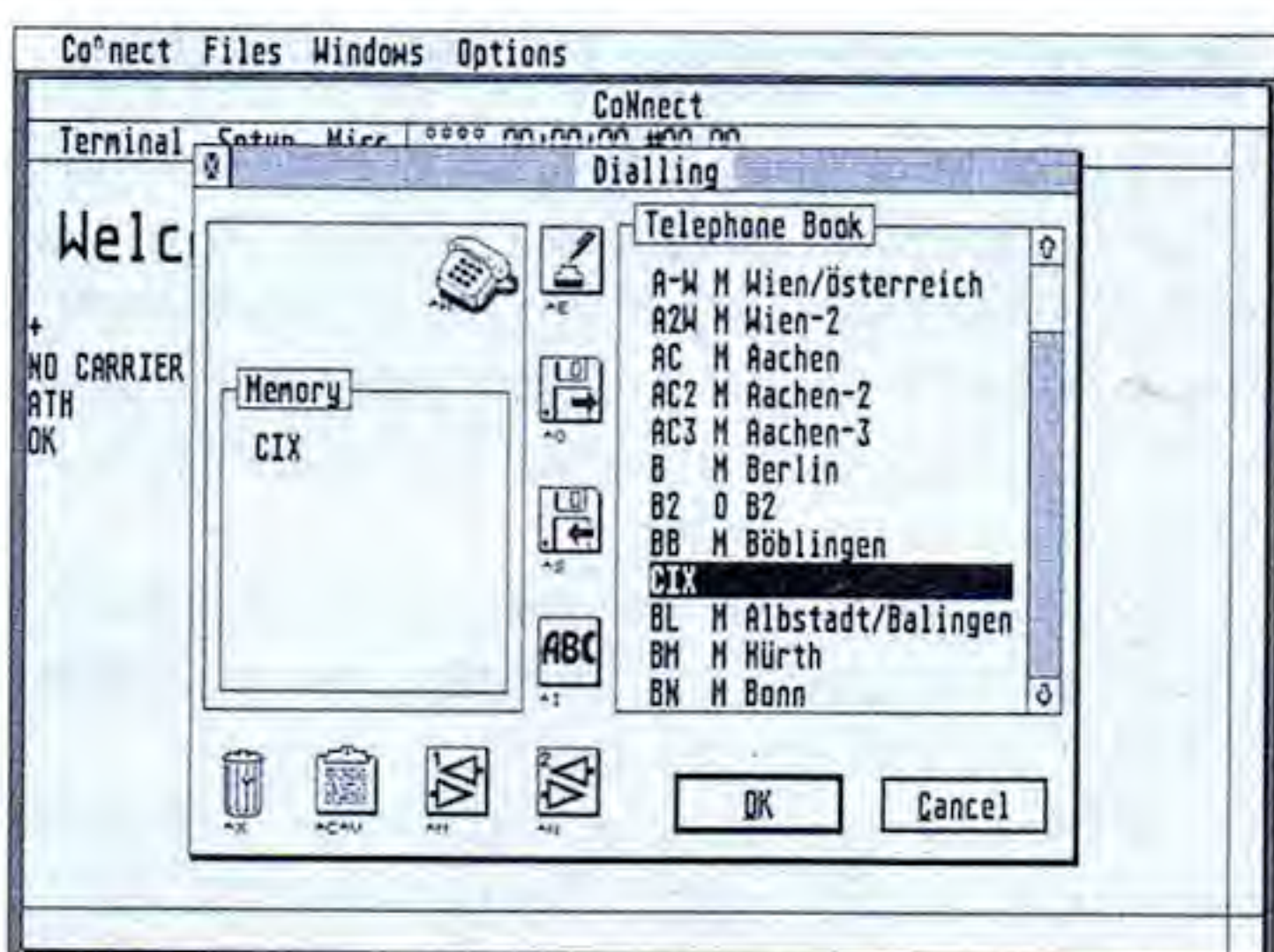
CoNnect is an all-singing, all-dancing comms system, with an excellent range of facilities and support for all the major Atari computers and operating systems.

However, unless you are going to use all that complexity, CoNnect might prove a touch daunting for the first-time user.

You can register for CoNnect in the UK with System Solutions, who provide the entire package (including a printed manual) for £29.99.



Each terminal window has its own settings, allowing you to change speed, flow control and bit-settings – even communicating via the MIDI or LAN ports if you wish.



The Dialler is well-featured, offering all the usual phone number directory options and extensive modem control settings

Going online with CIX

CIX is the UK's largest public computer conferencing system, with tens of thousands of subscribers. It has a particularly strong Atari presence, and most of the major Atari hardware and software companies are active participants – including Atari UK themselves.

You can order products and receive online support from companies such as GST, HiSoft, Compo and System Solutions. There is also active support for ST shareware products via CIX, and all of the major Atari magazines (including ST User, naturally) are represented.

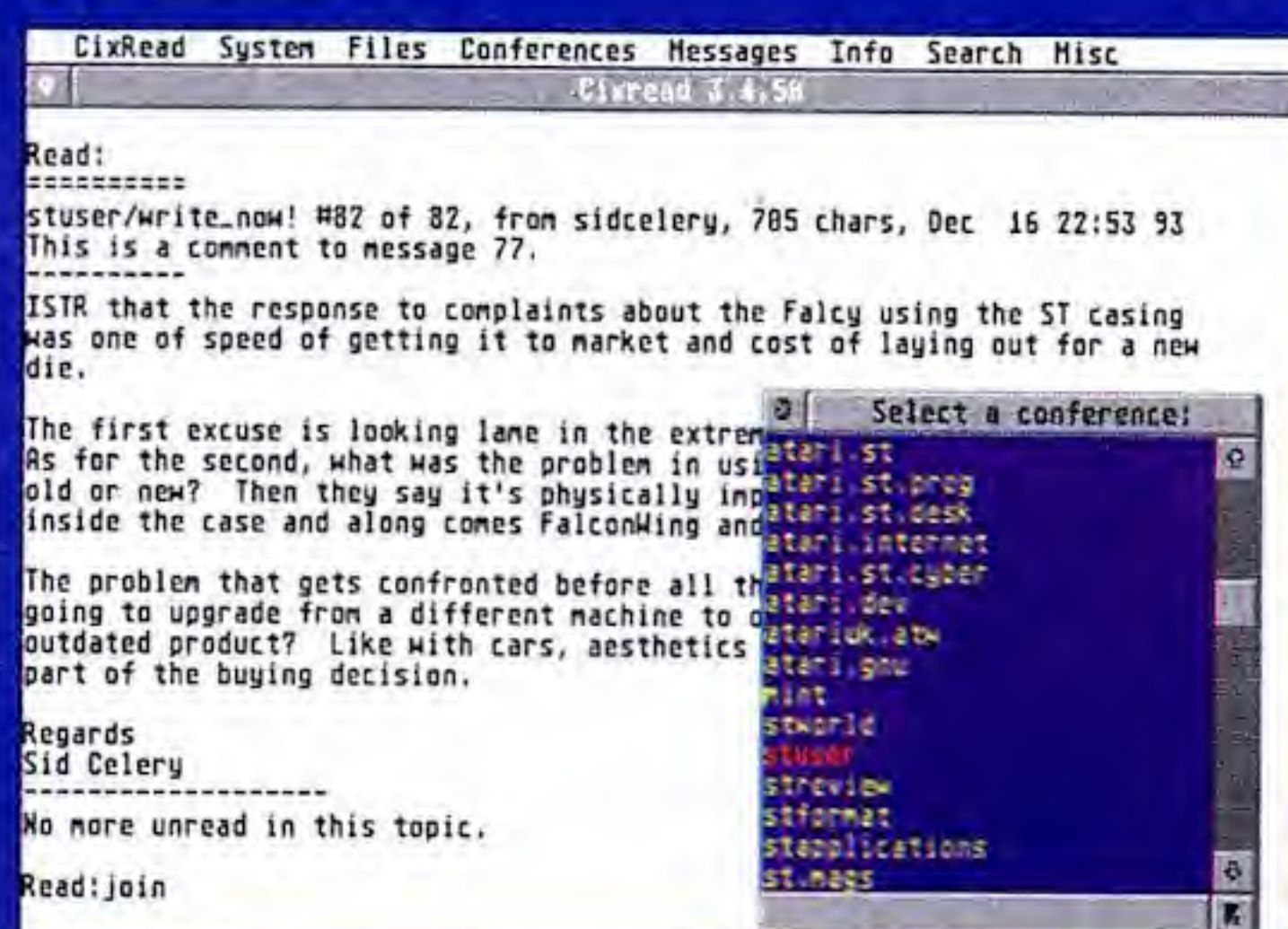
CIX is much smaller than CompuServe, but if you want to communicate globally it does provide direct Internet connection, allowing you to download files from international systems, interact with users all over the world via the Usenet conferencing system or private electronic mail, and access the World Wide Web information network.

Since the Internet is estimated to have more than 20 million subscribers worldwide, it's unlikely you won't be able to find someone to talk to!

CIX does not charge extra for any of these services, so all you pay is their basic connection rate. This works out to 6p per minute peak rate (weekdays 8 am – 5 pm), and 4p off-peak (all other times) – with a minimum charge of £6.50 per month (plus VAT).

High speed access is standard on CIX, and they have just installed a bank of state-of-the-art 28,800 bps modems. There are also plans for 'points of presence' around the country in the near future, giving local call access. Initial registration costs £25, which includes a ring-bound manual.

For more information on CIX, phone 081-390 8446.



Using Cixread on your ST allows you to read your CIX messages while offline, thus keeping your actual online (chargeable) time to a minimum

A glossary of communications terms

AT Command: See Hayes Commands.

Auto-Answer: Allows a modem to answer incoming phone calls automatically. Used mainly by BBS systems to accept incoming calls.

Auto-Dial: Allows a modem to dial phone numbers for you.

Baud rate: The basic speed at which a computer or modem can handle data transfer. A modem can often transfer text much faster than this figure by using compression techniques such as V.42bis or MNP5.

bps: bits per second: Refers to the number of 'bits' of data that a modem can transmit each second (eight bits making one byte). Due to data encoding methods, it is more correct to use this term to describe the transmission rate of higher speed modems, rather than quoting a baud rate (for example, a 14,400 bps modem, rather than a 14,400 baud modem).

Blink: A completely automated online session, in which your computer dials into a bulletin board, fetches any new messages and sends your replies, then logs off again. This allows you to read and respond to messages at your leisure, once you are offline, keeping your phone bill to a minimum.

Bulletin board: A computer system which you can dial into using a modem, and leave messages and files for other users. These are usually small, privately run, affairs.

Carrier: The tones which a modem sends down the phone line talk to another modem. When two modems connect successfully with each other, each modem's 'Carrier Detect' signal is turned on so the computer knows it can now start talking.

Checksum: A way to verify that data has been received correctly. Most often used within file transfer systems such as Xmodem.

Conferencing system: Rather like a large, commercially run, bulletin board. These tend to have multiple access points, allowing hundreds of subscribers to access the system simultaneously. They also often provide network access to other services.

cps: characters per second: This is a 'real world' indication of modem speed, and much more meaningful than the technical bps and Baud Rate figures.

CRC: Cyclic Redundancy Check: A more sophisticated type of checksum.

CTS/RTS: This is one type of Flow Control, which uses two special wires in a modem cable to indicate when the modem and computer are each ready to accept data. This mode can cause problems with older versions of TOS, but these can be cured by putting a small patch program into the AUTO folder on your boot disk.

Data Compression: See MNP5 and V.42bis.

Duplex: Defines how data is sent down the phone line. Full Duplex allows two-way transmission, whereas Half Duplex only allows one end to transmit at a time. Most systems use Full Duplex.

DTR/DSR: Control signals used to allow the modem and computer to indicate that they are switched on and ready to start work.

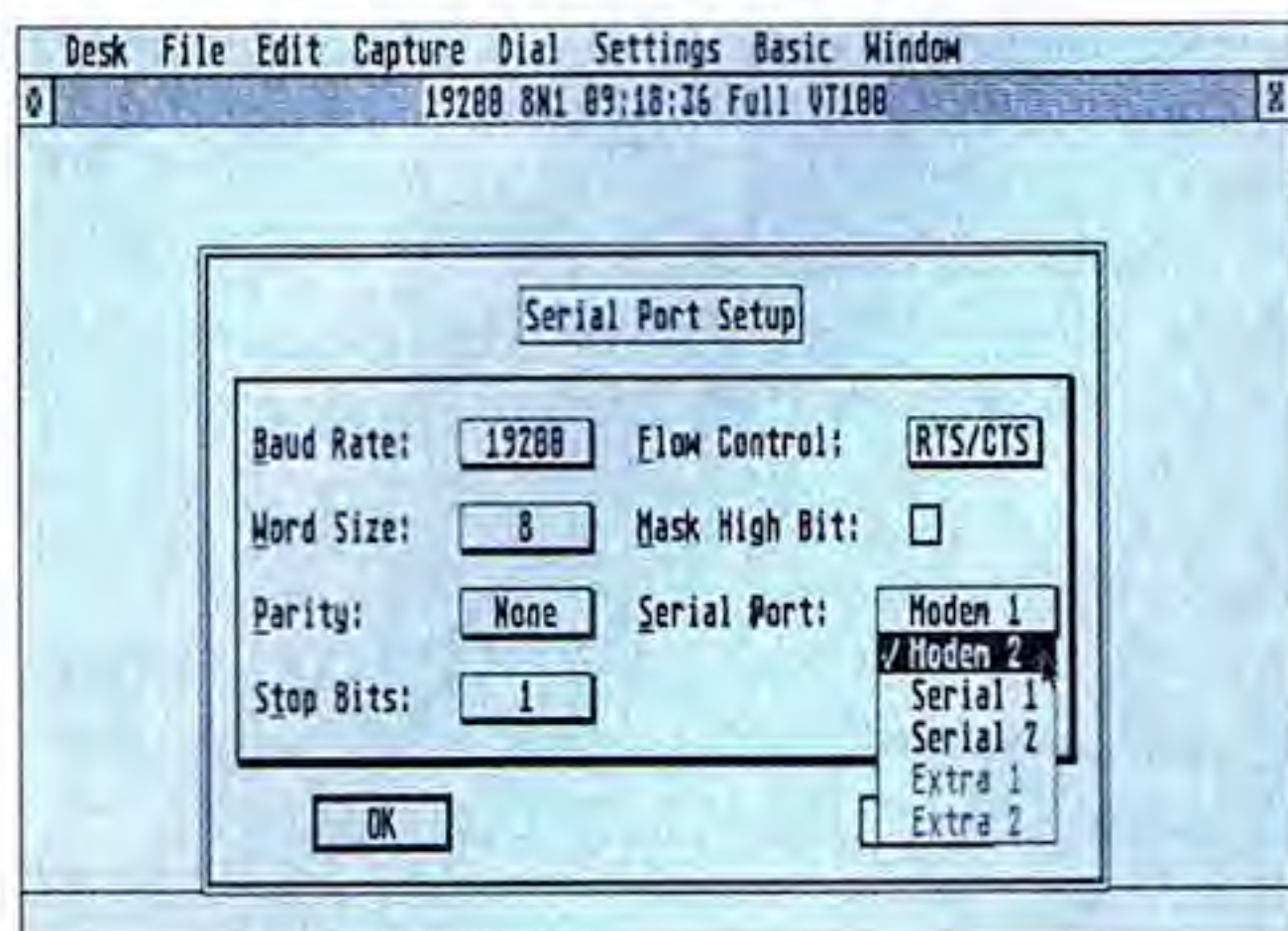
Error Correction: See MNP4 and V.42.

Flow Control: This allows two computers to inform each other when they are each ready to receive data. Sometimes, perhaps while writing a file to disk or while you are using a menu, a computer will temporarily not be able to receive data from the modem, so it uses Flow Control to tell the other end to stop sending for a moment. The most common types are CTS/RTS and Xon/Xoff.

Hayes commands: Several years ago, the Hayes company designed a modem which could be controlled by sending a series of special text commands from your computer, e.g. AT D to dial and AT H to hang up.

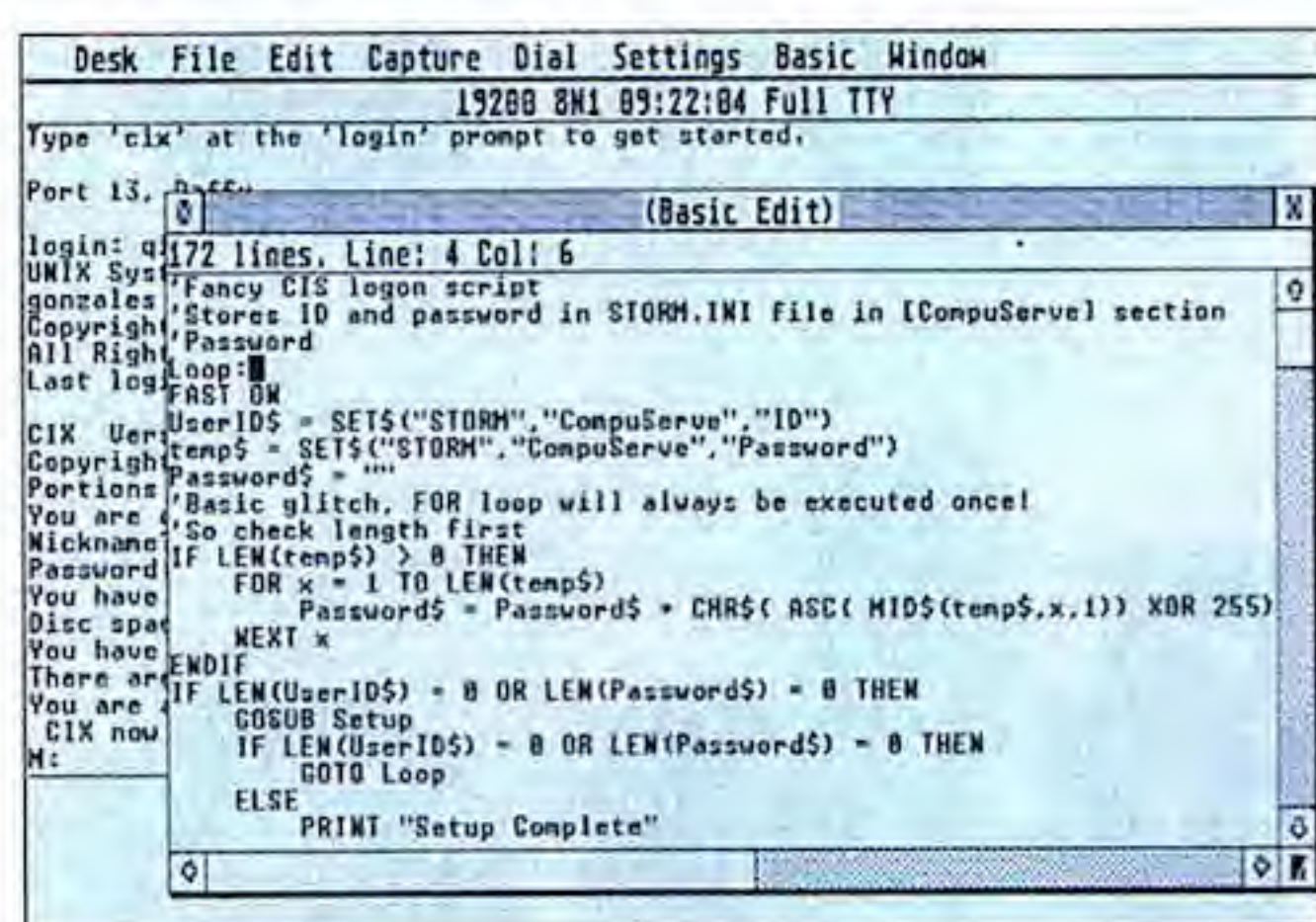
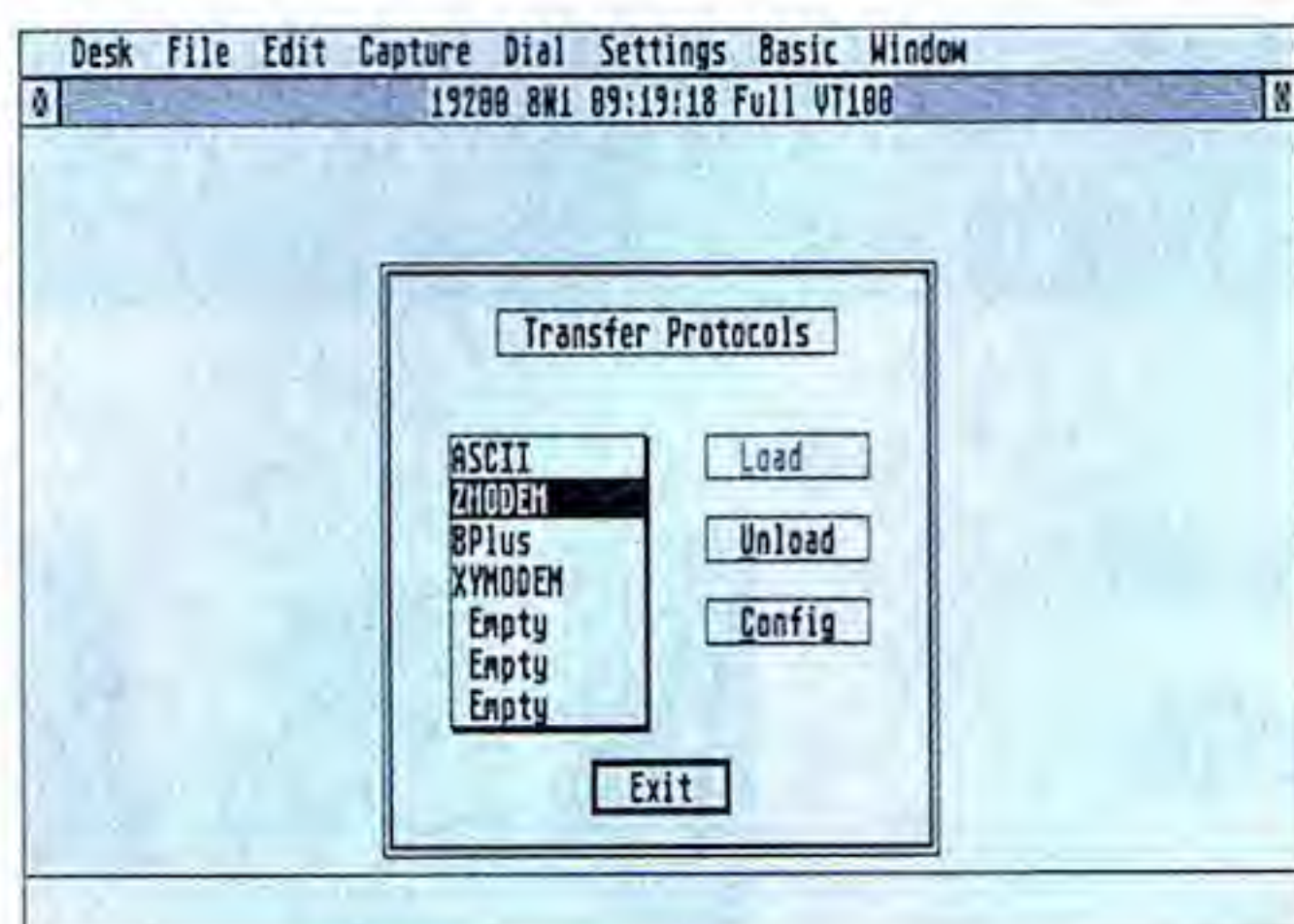
Previously, all modems were controlled by switches on the front panel, but this new system was so elegant and simple that most modem manufacturers now use it (although as new features have been added, much of the old simplicity has been lost).

Internet: A massive network of thousands of computers all over the world. Each system can communicate with all of the others, passing messages and files without requiring the user to connect directly to any of the remote systems. Rather too big to comfortably comprehend, it already reaches an estimated 20 million people, and is growing almost exponentially.



Storm's baud rate is limited to 19,200, even when using the extra serial ports provided on recent Atari machines

Terminal emulation modes and file transfer protocols can be installed or removed as required



Storm's script language should be familiar to most users – it's Basic, with some additional comms-related commands

CompuServing the UK and the US

CompuServe is a huge (really huge) American computer conferencing system. It boasts more than two million subscribers worldwide, including tens of thousands in the UK.

Many large companies offer product support via CompuServe, and due to its immense size there is usually someone who can help you out on just about any matter you could care to raise.

Like CIX, it's a subscription service, but charged in US dollars. Thankfully you don't need to dial to an American telephone number, though, as they have points of presence all over the world.

In the UK, direct access is available in London, Reading, Bristol, Edinburgh, Manchester and Birmingham at no additional charge.

One of CompuServe's biggest advantages is that it has a myriad of online services available.

These include airline booking, online newspapers, hotel/restaurant information, online shopping, entertainment reviews and many other areas.

However, most of these additional services are charged extra per minute

of connect time, which can make CompuServe expensive if you use it extensively – especially at higher speeds where the extra charges are greater still.

Also, although there is a massive range of US-oriented material, the UK facilities are naturally more limited, although there are a number of useful forums, plus UK news, entertainment and travel sections.

CompuServe is free for your first month's usage of the 'Basic Services' package, which thereafter costs \$8.95 per month. If you plan to access the system on weekdays between 8 am and 7 pm, there is a \$7.70 per hour peak-rate surcharge.

Once you have exhausted the free basic services, you can explore some of the more specialised areas at an extra charge of \$4.80 per hour for 2400 baud modem users or \$9.60 per hour for 9600.

The network links to the USA mean that, unlike CIX, no matter how fast a modem you own you won't get transmissions much greater than 1,400 cps.

For more information on CompuServe, phone 0800 289458.

Kermit: An error-corrected file transfer system, not much used on small computers but quite popular on larger systems. See also X/Y/Zmodem.

Local Echo: Most bulletin board systems actually send every character that you type straight back to you, and it is that 'echoed' character which appears on your screen.

When talking directly to another modem, this does not happen, so it is advisable to switch on a Local Echo mode, so that you can see what you are typing.

MNP4: Microcom Networking Protocol number 4. This is a proprietary standard which allows two modems to compensate for any errors caused by noisy phone lines.

MNP5: Microcom Networking Protocol number 5. This is a proprietary standard for the compression of data (especially text) sent via modems. The overall effect can be to virtually double your data transmission speed.

Offline Reader: A program which allows you to read messages and compose replies locally, then go online and automatically send those replies and fetch more messages to read. This has the advantage of spending the minimum amount of time actually connected to the online service ('blinking').

Parity: A mostly-obsolete method used to allow computers to detect errors. If used, it can be either odd or even.

RS232: The industry standard which defines the serial cable connection used between your computer and your modem.

Script: A series of instructions and commands which can be used by your comms software to automatically handle certain online tasks. Very sophisticated scripts can be used to automate an entire online session, from dialling to logging off – often in conjunction with an Offline Reader.

Start/Stop bits: Single bits of data which are normally sent before and after each byte.

Usenet: Internet's equivalent to a bulletin board, allowing any Internet user to read messages in thousands of special-interest subject areas, sent from all over the world. Replies are passed automatically from site to site until they have spread to all the currently connected sites. Due to the massive

numbers of people involved, Usenet newsgroups can get very busy, often handling thousands of messages per week.

'V' numbers: Predefined industry standards for modem-to-modem communications. Some of the more common ones are:

V.21: 300 bps

V.22: 1200 bps

V.22bis: 2400 bps

V.32: 9600 bps

V.32bis: 14400 bps

V.34: 28800 bps (very new)

V.42: Error correction system, also known as LAPM.

Compatible with, and slightly better than, MNP4

V42.bis: Data compression system. Compatible with, and slightly better than, MNP5

VT100/VT52: Technically, these terms refer to types of terminal hardware used for accessing remote computer systems. They define protocols to allow text to be moved around the screen, colours to be adjusted, etc.

These days, most people use a common-or-garden home computer rather than a dedicated terminal, so the old hardware must be emulated by the comms software instead.

Xmodem: A fairly old file transfer system, capable of sending a single file and verifying that it has been received correctly. Ymodem and Zmodem are more efficient.

Xon/Xoff: This is one type of Flow Control, using a special character to tell the computer at the other end of the line to stop sending text (Xoff, Control+S), and another to tell it to restart the transmission (Xon, Control+Q).

Ymodem: A file transfer system. Like Xmodem, but capable of sending additional information such as filenames, sizes, etc.

Zmodem: A file transfer system. Like Ymodem, but far more intelligent and capable of sending multiple files, checking whether similar files already exist, re-starting failed transmissions part way through, etc. Wherever possible, use this in preference to Xmodem or Ymodem.

Ulli Ramps

Like many other people these days, Ulli's first contact with computers was at the University. Although Ulli studied biology he couldn't avoid dealing with computers.

Having graduated a couple of years ago he wanted to continue with biology by doing research. Unfortunately, the only avenues opened in this area were short term so he founded ROM instead.

The first computer Ulli actually bought was a Commodore 64 – another German favourite. With the advent of the ST he switched platforms and upgraded to an Atari, like many other C64 owners worldwide. The ST was heavily used during Ulli's



university days and he did a lot of programming. Together with his partner, he then decided to turn this into a business and charge for their work. That's how ROM was founded in 1986.

Today, Ulli concentrates on marketing but also participates in original product design, although he leaves the programming to Christian. "Christian is clearly a better programmer and I'm clearly a better manager... Unfortunately!" said Ulli

laughing.

On a more serious note he added: "I'd like to do more programming but we know each other's strengths and this division of labour works best".

Ulli Ramps, the current managing director of ROM, started in the computer business together with a partner back in 1986. They started out as straightforward dealers selling assorted computer products.

This went on until a large pharmacy attached to a major Berlin hospital engaged them to provide a complete label printing system. This was a huge contract and Ulli looked everywhere for an adequate package but could not find any that satisfied all of the requirements.

As luck would have it Ulli, through his brother-in-law, got to know Christian Nieber around this time. This was in 1987 and the Atari ST was still a relatively new computer.

PROGRAMMING

Christian wrote a book on ST assembly programming for a major German publisher who provided him with a complete Atari ST developer kit.

To cut a long story short, the two went to the pharmacy and the project was on. However, Christian was of the opinion that to develop such a complex system for a single contractor would not be cost effective. Because of this, he wrote the whole package in such a way that it was more general in nature.

As unbelievable as it may sound, this label printing program was the seed which in time eventually blossomed into what is to become one of the best word processing packages for the Atari ST –

Don Maple met ROM at an Indian restaurant in Berlin and got talking about the hot new developments of sweet Atari software

Papyrus. After over two years of intensive development, Papyrus was previewed at the famous Atari Dusseldorf show in 1991. This showing created a lot of interest and the program was officially introduced in 1992 at CeBIT, the biggest computer show in the world.

In 1991 ROM, as a company, changed direction and started focusing on software. At this time the original partner decided to leave. Both Ulli and he were full-time students with a computer business on the side.

Having finished his studies the partner went on to pursue other interests and Ulli joined forces with Papyrus' programmer Christian Nieber.

The two are now equal partners in ROM. Both Ulli and Christian are involved at the design stages but after that they specialize – Ulli takes care of marketing while Christian does the programming.

Originally, Papyrus was distributed through an external company called

It's the

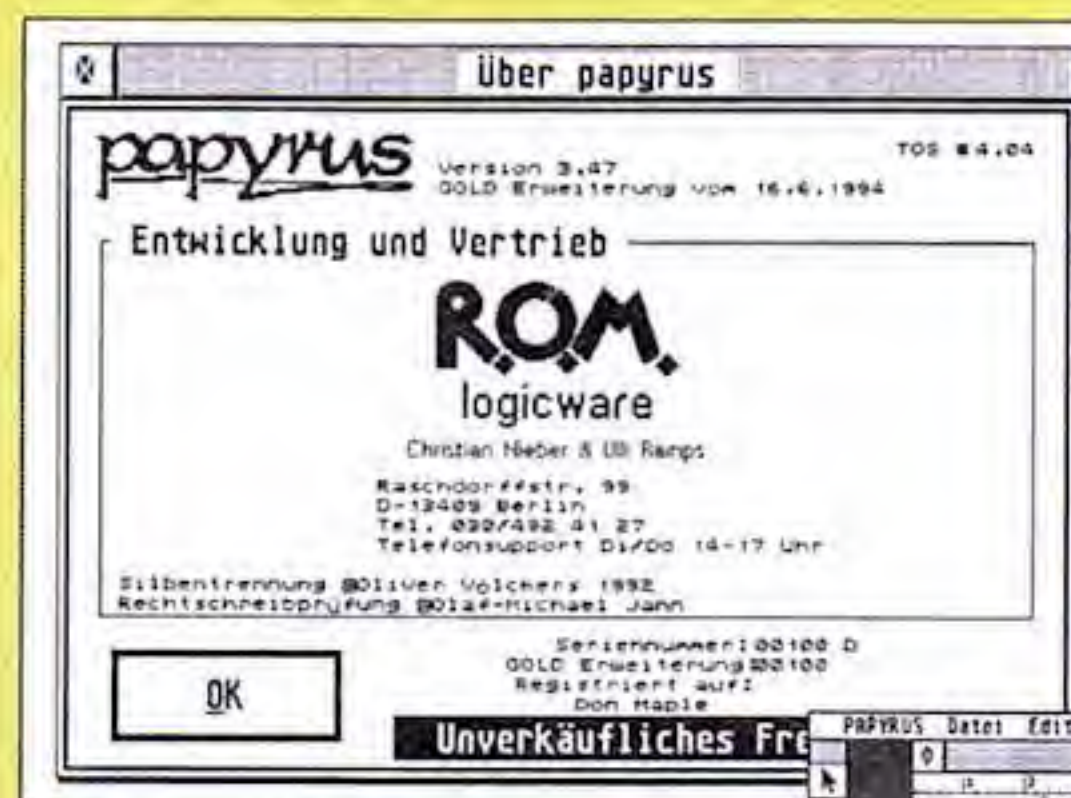
Digital Desktop, but in 1993 Papyrus was brought back inhouse and today everything is done at ROM.

EXCLUSIVE

In addition, since the beginning of 1994, ROM also markets products for other companies. For example, they have exclusive rights to Atari versions of certain SciLab software.

The products in question are XACT, a chart publishing program, and XACT-Draw, a vector-orientated drawing pack-

Papyrus



Papyrus won't exactly let you print money but it's quite capable, as this EuroCheque mock-up clearly shows

A peek of the original German Papyrus about box. The English language version of the program is available in the UK from HiSoft



An empty Papyrus desk reminiscent somewhat of the Next with its "tool bar" tiles on the left

Describing Papyrus as a word processor does not do it justice. A document processor would be more apt. It's very easy to use because it employs all of the latest GEM capabilities.

Internally, Papyrus was programmed using so-called object orientated programming techniques. This means everything in Papyrus is an object that can be freely manipulated.

In addition to importing and exporting ASCII text, Papyrus also works with RTF – Rich Text Format. RTF, unlike ASCII, preserves all text attributes such as font type, appearance, size, etc. which is increasingly making it the universal text format of the future.

Papyrus is very flexible when it comes to fonts. It can use old GDOS fonts as well as new SpeedoGDOS vector fonts. In addition, it also

Christian Nieber

Christian is the senior programmer and equal partner at ROM responsible for realising projects he and Ulli design together. He was always a dedicated Atari fan and his first computer was an Atari 600XL.

His first commercial project was a contract with Sybex, a major German computer book publisher. They got in touch after Christian won the first prize in a program writing competition.

Sybex provided him with an Atari ST and the complete developer's documentation to write "Atari ST - Programming in machine language".

Shortly afterwards, Christian got to know Ulli and they started to



work on the label printing program. It was a fairly complex program using different character sets and with some aspects of a vector drawing package.

Various fonts had to fit within assigned rectangles and it soon became apparent it was a small step from there to a full blown word processor.

At that time, word processors on other platforms were getting an increasing number of DTP features and no such program was available for the ST.

Today, Christian is about to graduate from his computer science studies where his main interests are computer graphics. At home he has a TT with a big screen monitor.

all in ROM



Attila Kecskes, runs day-to-day operations at the office

age. The cooperation with SciLab is very interesting because the company, having ported XACT programs to OS/2, was quite busy which is why they engaged ROM to handle the Atari versions.

This cooperation will also go the other way because ROM is porting Papyrus to OS/2 and, although it's still early days, chances are SciLab will reciprocate and lend a hand in introducing Papyrus into the OS/2 market.

Indirectly, this is very good news for Atari owners because it means Papyrus will then be established across different

platforms instead of being only a niche product.

Another cooperation of particular interest to British Atari owners is that since last Christmas, ROM has entered into an agreement with HiSoft to carry their product line in Germany and vice versa.

That is to say HiSoft will be marketing Papyrus in the UK. Other international partners include Paradox in the Netherlands and Arobace in France.

In Germany, ROM works closely with Omikron. The two companies share

joint advertising and attend computer shows together by sharing a stand. Both companies also sell each other's products making it convenient for customers by offering one-stop shopping.

This sort of cooperation among Atari companies which are not in direct competition is becoming very popular in Germany. It cuts down on expenses and is beneficial to all.

Since earlier this year, ROM also changed its name to "ROM logicware" to reflect the addition of hardware to their product line. An example of this is a popular product called Heatseeker. This is an adapter to connect Atari SLM laser printers to the Falcon.

EMPLOYEES

There are four full-time employees at ROM, although at times various other people are engaged as required. Future plans revolve around continued development of the existing product, in particular Papyrus. A brand new product is a network-capable data base called Pegasus written by Christian Lehmann.

Although ROM is looking into expanding to other platforms such as OS/2 and other 32-bit operating systems, they are quite satisfied with their Atari business.

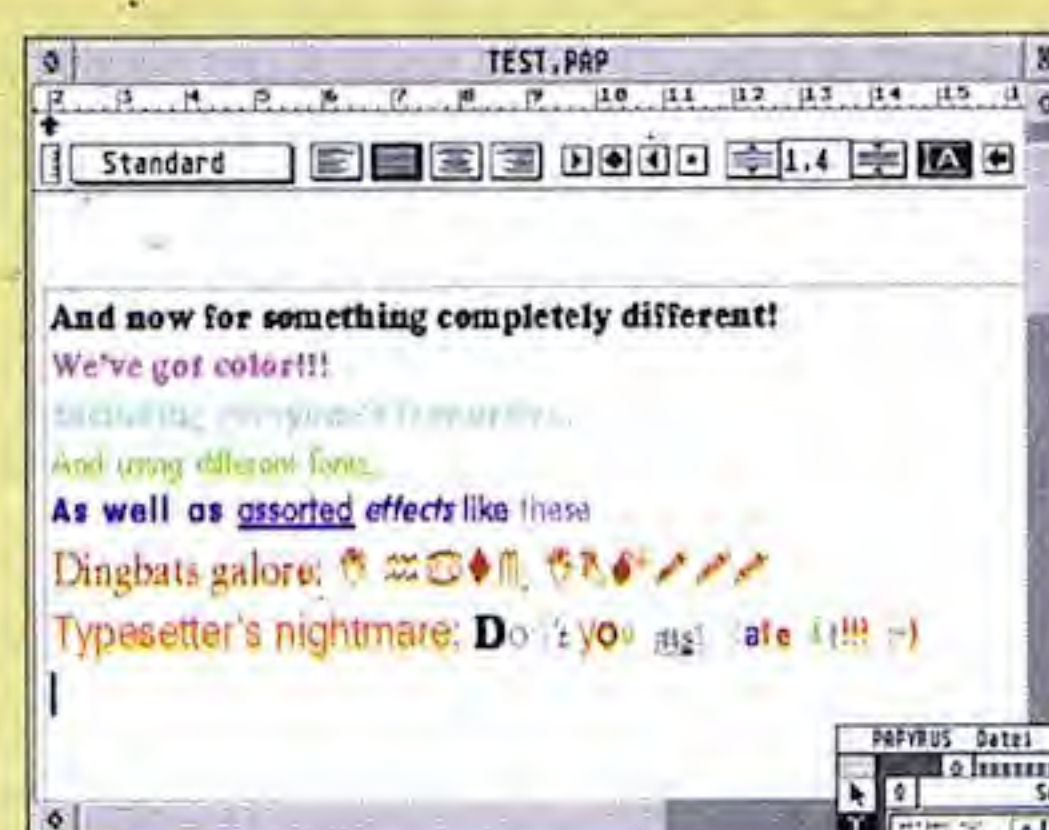
Contrary to a slowdown elsewhere in the world, there is no significant drop in sales in Germany thanks to a large number of Atari STs, as well as very dedicated user base.

supports Signum fonts from Signum word processor.

This gives the user a choice of a wide variety of fonts. Instead of being limited to custom fonts common among most other word processors, Papyrus will, for example, happily use any new fonts installed under Speedo.

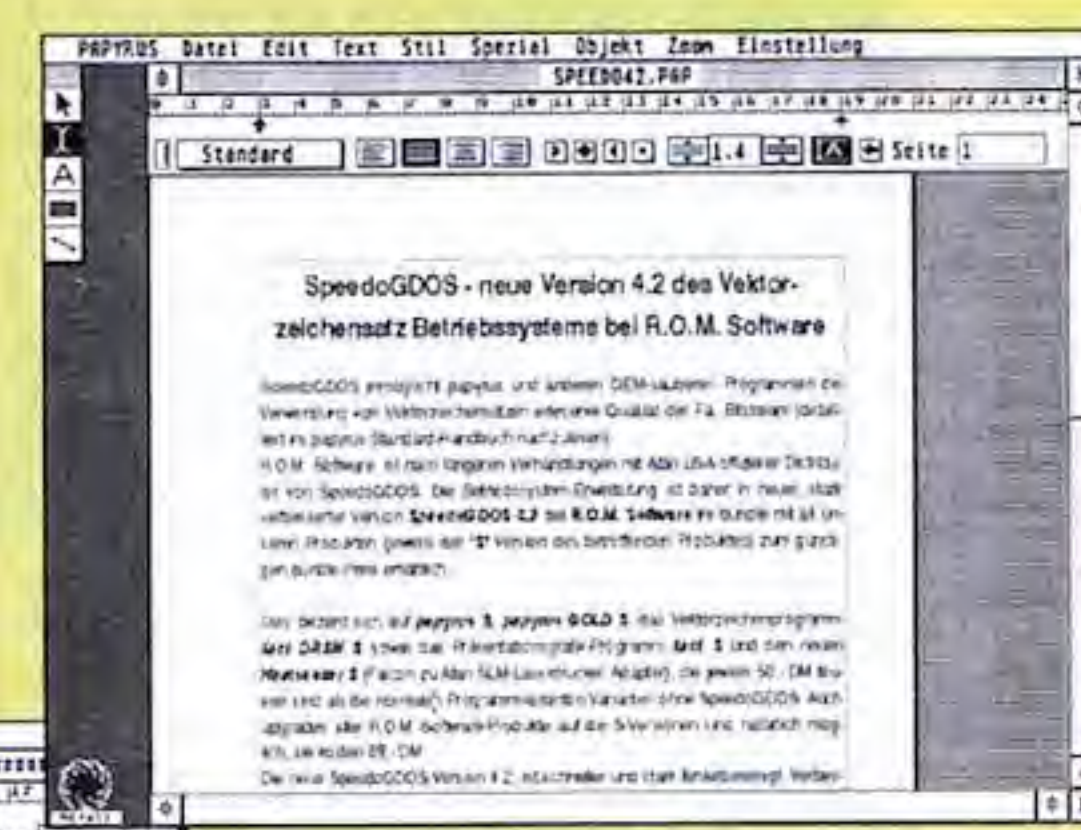
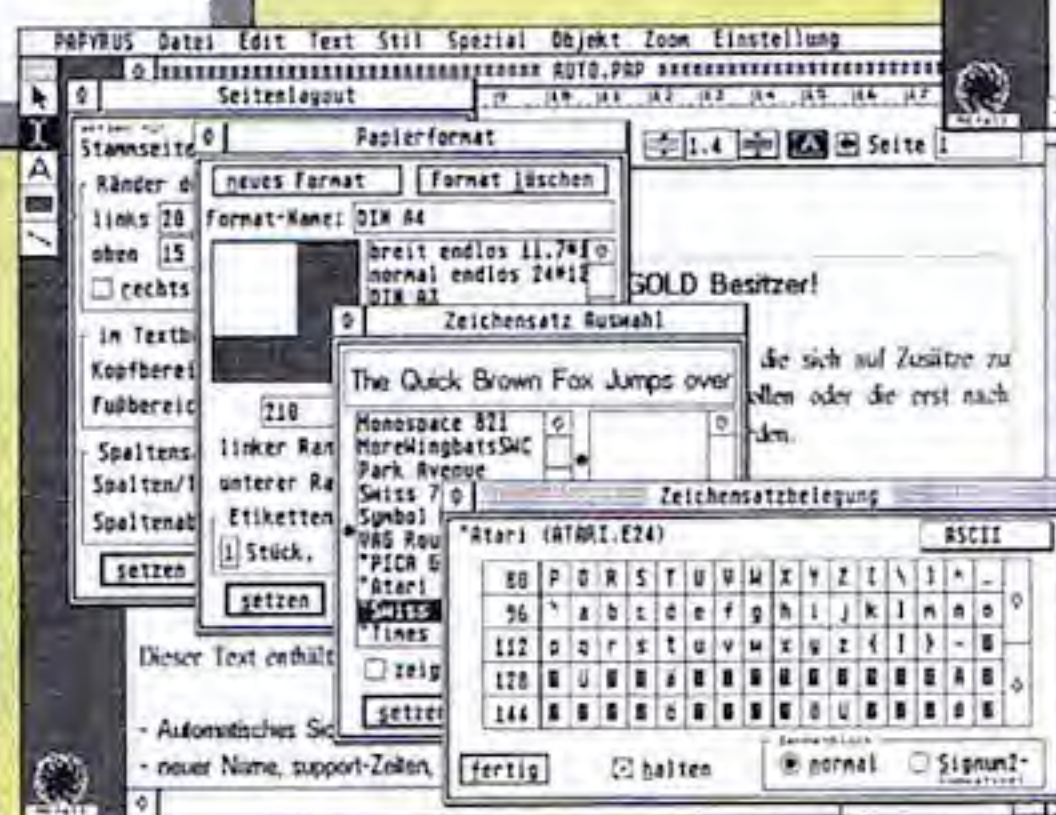
The latest version of Papyrus also adds importing of vector graphics, typesetting at 600 dpi, WYSIWYG tables, simple spreadsheet functions and automatic table of contents creation.

British users also have access to this program, currently in version 3.5, because it has been imported into Britain by HiSoft as Papyrus Gold. This version also contains an English language spell checker.



Papyrus is also capable of colour word processing

This intentionally cluttered screen shows only some of the many possible Papyrus settings



Papyrus can also use Atari SpeedoGDOS and its high quality vector fonts

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hardware for
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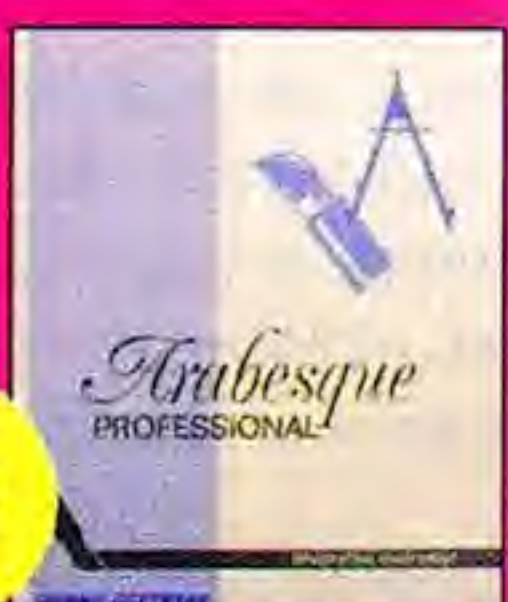
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The Protext Companion

ST users may sometimes feel hard done by when browsing through the computer book shelves at their local Waterstones or Dillons since almost everything is about PCs and Macs these days, but one new title will be of great interest at least to Protext owners.

Sigma Press' *The Protext Companion* by Alan Bradley covers Protext for all of the many computers on which the program runs, but since all these versions are almost entirely identical it might as well have been written specifically for the ST.

Aimed at "people who hate manuals and don't really love computers", Bradley's book is more of an introduction to Protext and hand-holding guide for novices than a source of advanced tips and tricks for experienced users.

For people like me, who have been using the program for many years, this is a shame as I have always felt that the power of Protext deserves the sort of heavyweight volumes exploring its full potential that you can get for programs like Microsoft Word or Word Perfect – loads of useful

macros, mailmerge programs and so on. Arnor's manuals are among the best in the business, but like all manuals can go only so far in describing possible applications for the more advanced features.

The Protext Companion covers less ground than the manual but takes more time to explain the basics in ways that beginners can understand. There are plenty of screenshots and other illustrations and its structure is very well thought out as a learning curve, taking readers from "Installation and Configuration" to the more demanding features such as Index and List of Contents generation.

Author: Alan Bradley

Title: The Protext Companion

Publisher: Sigma Press, 1 South Oak Lane, Wilmslow, Cheshire SK9 6AR

ISBN number: 1-85058-520-2

Price: £14.95

word, as it does not seem possible to wrap text around images in the current version.

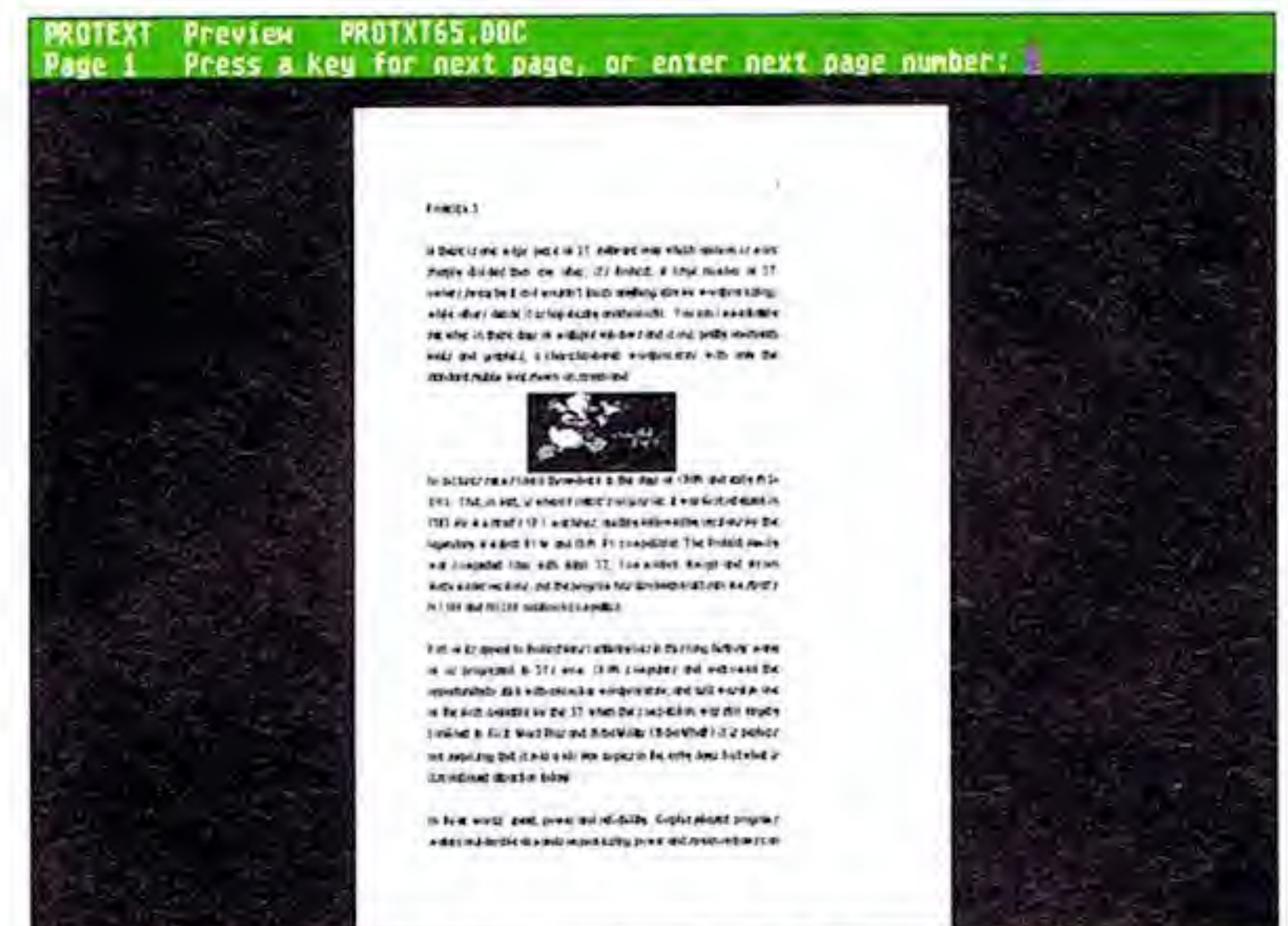
Aficionados of graphic word processors like Calligrapher or Papyrus may not be too impressed, but I for one am glad that Arnor have resisted the temptation to abandon the basic Protext philosophy and introduce on-screen fonts and graphics.

The other new features in Version 6.5 are more in line with the program's traditional strengths, adding further features to its unrivalled text-handling

currently in memory, but in any number of disk files. This is amazingly useful for all kinds of purposes.

Forgotten which letter mentioned your recent holiday in Barbados? Just tell Protext to "find Barbados" in your correspondence folder (wildcards are permitted) and the relevant file will be loaded and displayed on screen, with "Barbados" highlighted.

Desktop publishers can automatically find-and-replace all single quotes with double quotes in all the text copy for a magazine without having to load each file



Here the Donald Duck picture has been centred in the text column. It is not possible to wrap text around it

Power

powers. I do not, for example, know of another ST word processor capable of automatically correcting annoying typos such as "teh" for "the" or "an" for "and" – yes, automatically, without having to fire up the spellchecker.

The list of frequent errors can be edited and added to by the user, even imported from a database. For example, if you suddenly realise during an ordinary spellcheck that you tend to have trouble with a certain word, just tell the spellchecker to add it to the Auto-Correct file ("Learn" is one of several new options in Protext's excellent and lightning-fast spellchecker).

Auto-Correct will also automatically capitalise words at the beginning of a sentence, or change "LONDON", for instance, to "London".

Another Auto-Correct goodie is the ability to expand abbreviations. If you are writing an article on pre-menstrual tension, for example, you can teach Auto-Correct to convert every occurrence of "ptm" into the full expression as and when you type it in.

My own favourite among the new features however, is the ability of Protext 6.5 to find and replace text strings not only within the file or files

individually. Again, I know of no other word processor that can do that. If you then remember that Protext can find and replace any character, including non-printable control codes, you may get some idea of how powerful this new ability to search through disk files could be.

Since quotes have just been mentioned, there is also a neat little option to substitute proper typographical quotation marks for the ordinary " when printing. Single or double quotes are correctly converted, and foreign language conventions – such as the German low and high quotes – observed if the spellchecking language is set correctly.

UPGRADE

So what's the verdict? If you are already one of the many existing Protext users, you will of course rush to upgrade your program to this newest version.

If you're not, and maybe already own one of the many graphics-based word processors for the ST, you may still give serious consideration to Protext as a second word processor.

I know that sounds extravagant but why should word processing be different from graphics? We are all used to having

to work with different art packages depending on the job at hand, as there isn't one that is perfect for everything.

Protext cannot compete with the likes of Calligrapher, Papyrus or That's Write in terms of pretty screen appearance and WYSIWYG representation of fonts and pictures. That can be a serious drawback for certain kinds of jobs.

For other jobs, however, its power, speed and flexibility simply leaves the competition gasping. It may have to share the space on my hard disk with other word processors these days, but I would not want to be without it.

BOTTOM LINE

FEATURES

The most powerful word processor for the ST

Excellent
Good
Average
Bad
Appalling

EASE OF USE

Needs some effort to unlock all its power

Excellent
Good
Average
Bad
Appalling

VALUE FOR MONEY

Not a budget product but good features-per-pound ratio

Excellent
Good
Average
Bad
Appalling

Product: Protext Version 6.5
Supplier: Arnor Ltd., 611 Lincoln Road, Peterborough PE1 2HA Telephone: 0733 68909
Telephone: 0525 718181
Price: £99
Configuration: ST/TT/Falcon with at least 1Mb RAM



Art For Kids - the opening screen (complete with fanfare of trumpets)

The stamp tool lets small children create pictures quickly and easily



What is it that kids like best about computer games? Brightly coloured, animated pictures? Or exotic, amusing sounds? If the truth be known, it's probably the combination of the two and most educational packages aimed at youngsters nowadays have elements of sound and vision to attract, entertain and, of course, teach.

The same hasn't been true of other programs. I've seen a few children's paint programs around but none of them have combined graphics and sound quite as well as Art for Kids, a new paint program from the Australian company, Moving Pixels.

Art For Kids is available for three different Atari setups, the STE, the TT and the Falcon, running in ST low res, TT medium res or 80-column VGA mode respectively, but all use a maximum of 16 colours.

It comes neatly packaged in a smart carrying case and contains all three versions of the program as well as a 40-page A5 booklet with full instructions.

Sampled sound isn't usually associated with paint programs but Art For Kids relies on weird and wonderful sound effects to add to the fun of the package.

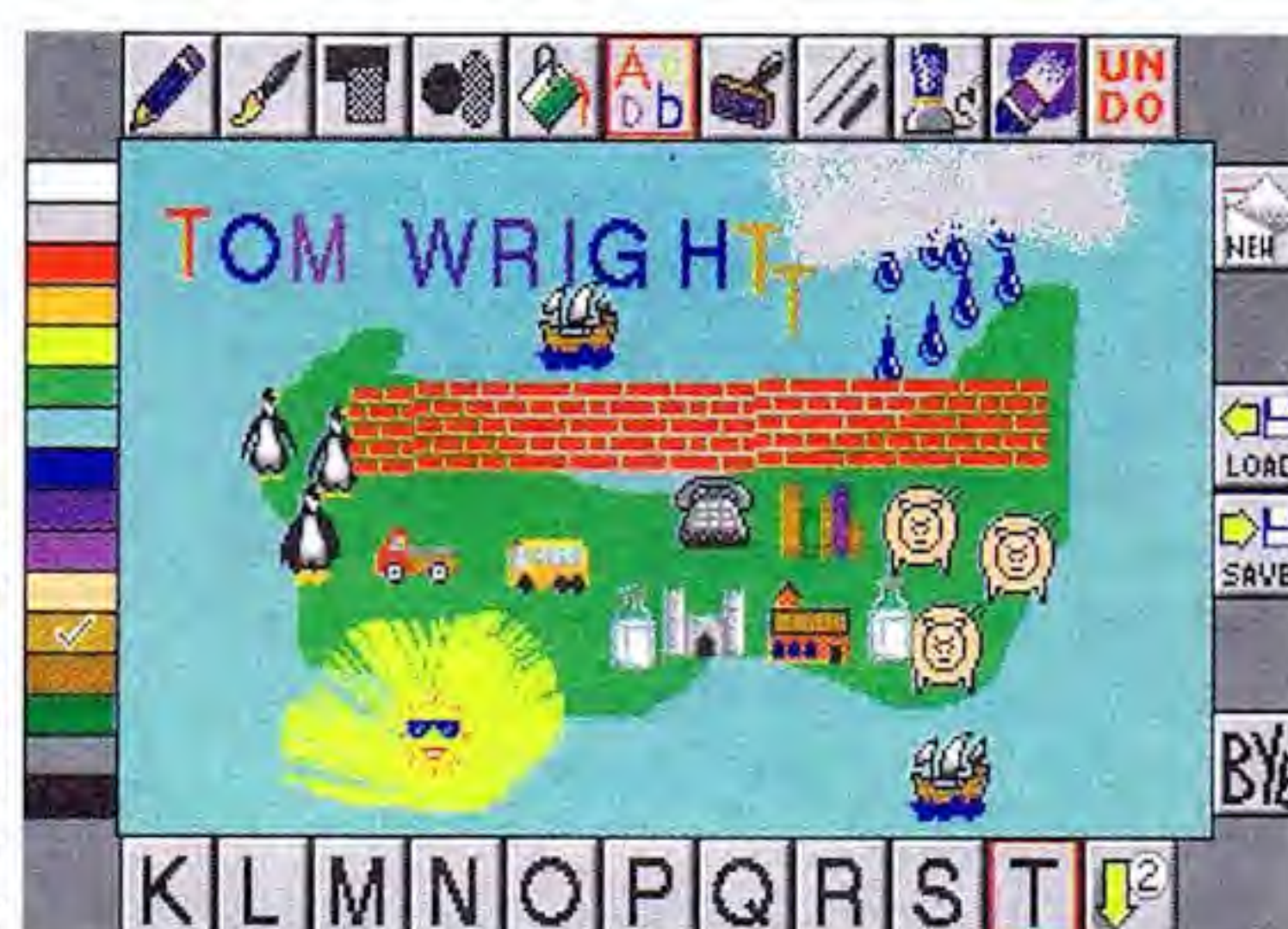
The quality of the sounds is naturally many times better on the Falcon but from the point of view of little Johnny doodling away with his mouse, there's very little in it.

You can try out the STE version by unpacking and running this month's CoverDisk demo. It can be run from a floppy disk though it runs much better from a hard drive or a RAM disk as many of the tools require disk access to load associated pictures or sounds.

Art For Kids has its own unique interface. It isn't GEM based – with good reason – but that doesn't mean it isn't

Andrew Wright looks at Art for Kids, a new children's paint program from down under

Text can be added in any colour, though in one size and in upper case only



Child's

easy to use. The main painting area is in the centre of the screen with tool icons at the top and bottom, a palette on the left and the load, save and new command buttons on the right. The icons are always in view, whatever mode you are in, which begs the question about how to access the edges of the canvas that are inevitably covered by these icons.

Surprisingly, there is no canvas covered by icons – the program works on screens 272 pixels wide and 152 pixels high and even saves them in IFF format at this size. On a Falcon you get a much more impressive 528 by 384 pixel canvas but the images are still saved as IFF files.

This approach makes the program much easier to use, particularly if you

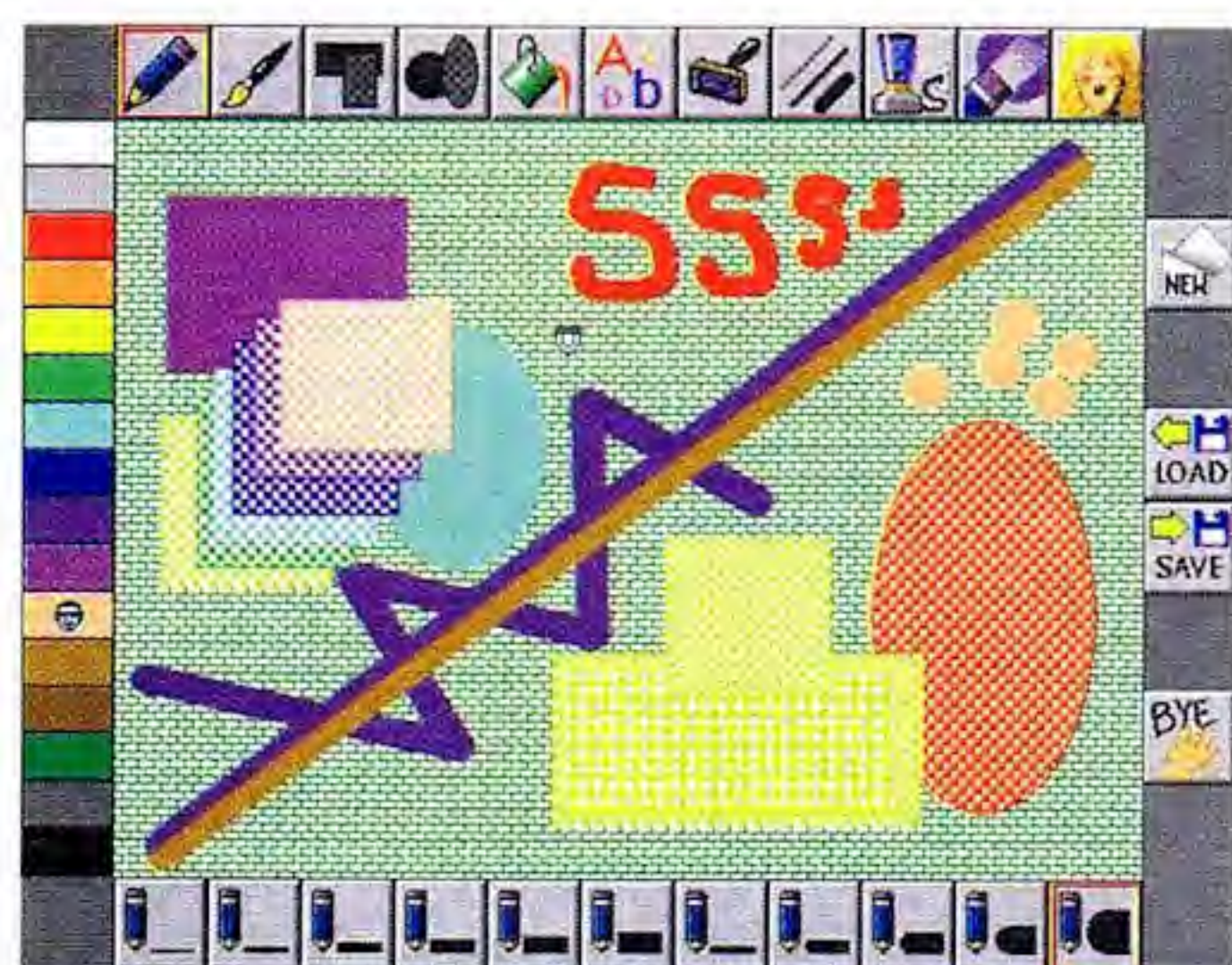
happen to be a member of the age group it's aimed at. Many paint programs hold little interest for youngsters because the wonderful effects they watch you demonstrate are hidden away under layers of incomprehensible menus.

What they can't see, they don't use – and if they don't use, they soon get bored. With Art For Kids, the tools are always there.

On the other hand, you can't create standard 320 by 200 Degas pictures, even if you convert them using a program like Imagecopy. Well, you can, actually, but there will be a large white border on two sides. The finished pictures are considerably smaller than the pictures produced by other paint programs but they can always be printed at twice the size if you want them to end up as hard copy.

As mentioned before, the program uses a fixed 16-colour palette. This is essential as the program offers a range of multicoloured stamps – in reality small block images – and any interference with the palette would render many of them unusable. It shouldn't matter too much as most younger users won't want to fiddle with the palette to create different colours anyway.

Along the top come the 11 primary tool icons. Whenever a particular tool is selected, the row of icons along the



Art For Kids is well endowed with normal shape tools

Art For Kids contains several ready drawn pictures that can be blended with existing ones



bottom changes to offer various sub-options.

The pencil tool is for freehand drawing and offers 11 different thicknesses and the choice of square or rounded ends. Next comes the paintbrush, which conceals the tools described in the accompanying panel.

This is followed by the two shape tools, one for square and rectangular shapes and the other for circular and oval ones. There is a choice of 11 monochrome fill patterns for each one in the colour chosen with the palette selector.

The area fill tool comes next and again it offers 11 patterns in whatever colour is selected in the palette. There is a useful half-fill option (a 50% chequer board effect) that lets you fill areas with lighter colours if necessary.

Following the fill tool comes the text tool. Here you can select a letter or number to add to the picture – in any colour – choosing from the ten icons on the bar at the bottom which scrolls using the arrow button. Only upper case letters are used but the characters themselves can be used as drawing tools or even stamps.

The stamp tool is next. This offers a selection of 40 stamps in four banks of ten, each of which is a tiny, nicely drawn

play

picture in up to 16 colours. There's a good range of stamps for different uses, although my nine-year-old assistant tester did comment on the preponderance of trees, flowers and fruit. More animals and cars would have been a good idea, as would a face or two.

After the stamps come the lines, 11 in all and again with the choice of rounded or square ends. This is followed by the blender icon that offers 11 special effects tools. These range from the lightener that turns your picture into a faint background, an inverter that switches colours to their opposites, and two tools, ripples and chequer board, that apply a kind of screen effect to the pictures.

Also included are tools for covering the picture in coloured blobs, odd symbols, rays, cracks or dashes as well as horizontal and vertical flips.

Mistakes are pretty common, especially when youngsters are experimenting with the tools, so erasers are a must. Happily, there is a dedicated eraser tool with 11 options. You can choose between four sizes of standard eraser or one of the rather more exotic ones.

The rub-in tool lets you rub out your own picture and reveal another one underneath, randomly chosen from a selection stored in the program itself.

Brush effects

The scribble tool is a freehand drawing tool that converts smooth mouse movements into jerky lines, a little like a crack in a window. Colour can be specified from the palette.

The drip tool creates an effect like drips of paint following the movement of the mouse. You choose the colour and the program does the rest. The drips are randomly sized and great fun – thanks partly to the excellent accompanying sound!

Spray can: This needs little introduction – you can use any colour but there are no user-definable parameters.

Sprinkles is identical to the spray can tool but uses several different random colours.

Spikes: This produces a shattered glass effect and has a marvellous sound too.

The kaleidoscope tool is a four-way, real-time mirror. As you move the mouse, the same freehand line is drawn in three opposite directions.

Colour bubbles: As you would expect colour bubbles of different colours are randomly spread across the picture.

Spiral: A great tool this one – just click on the picture and you get a spiral of random size in the chosen palette colour.

Munchers: This one places Pacman-shaped objects wherever you click the mouse.

Sticks are small randomly placed vertical strokes that are ideal for representing grass.

Multilines is another tool that uses the colour selected from the palette and acts in much the same as ray tools in standard paint programs.



From left to right: the scribble, drip, spray can, sprinkle and spikes brush effects

You can do it block by block, pixel by pixel or line by line.

Other options include destroying your picture by the bomb method (self-explanatory!), fading it out, scrolling it out or just covering it in white blobs. This kind of effect is less futile than you might think – children often tire of their pictures and want to start again, having just discovered a better, more spectacular effect. These methods of closing their pictures are just as creative and much more fun.

There's one thing I can't show you in a written review and that is, in my opinion, the best part of Art For Kids. I'm referring to the superb sampled sound effects that give each tool a unique associated sound.

For example, the scribbled lines come complete with a scratching sound, while the flood-fill sound effect is a gurgling noise like a jug being filled. These add enormously to the enjoyment of the program and are guaranteed to bring a smile to any child's face – especially the surprise ones!

Finally the right-hand icons include load and save facilities (pictures are stored in IFF format owing to their non-standard size), a new icon to start again and an icon labelled "bye" which does what you would expect.

Art For Kids lacks one rather obvious feature and that is printing. It isn't really

necessary though and given the difficulty of supporting every type of printer that the Atari can hook up to, it is quite understandable. Indeed Moving Pixels were probably quite right to leave it out – I would always recommend those with colour printers to buy a dedicated printer driver program like Imagecopy, Flexidump or HPChrome which can then be set up for perfect results with whatever printer you use.

Art For Kids is an excellent product that offers hours of fun for dedicated young computer artists. The "live" tools and sampled sound offer a new approach to painting. Children can create traditional pictures, of course, and Art For Kids is a program for just that.

But the real secret behind Art For Kids is that designs and images can be faded, lightened, rubbed out and blended, turning painting into a completely different art form. It is a fun educational toy not to be missed.



Special effects are this program's forte

BOTTOM LINE

FEATURES

A whole new world of paint entertainment for kids

Excellent
Good
Average
Bad
Appalling

EASE OF USE

The only thing that's easier to use is a paint brush

Excellent
Good
Average
Bad
Appalling

VALUE FOR MONEY

Should keep the little ones amused for a good few weeks

Excellent
Good
Average
Bad
Appalling

Product: Art For Kids

Supplier: Goodman International (DEPT STU), 16 Conrad Close, Meir Hay Estate, Longton, Stoke-on-Trent, ST3 1SW

Telephone: 0782 335650

Price: £24.95

Configuration: Any STE/TT/Falcon with 1 MB or more (VGA only on Falcon)

ATARI ST USER

exclus

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Atari Joystick

This is an unbeatable offer for all gamers - an Atari joystick for just £2.99.

It's ideal for anyone, but especially for those who would like a second stick ready as a spare for visiting friends. With easy access Fire buttons on both sides of its small case, this model is suitable for left and right-handed players and fits

comfortably into the hand.

**ONLY
£2.99**

DataView monitor

This SVGA high resolution mono monitor has been specially modified to work on all STs and is ideal for such applications as DTP, music and word-processing.

It features a 14-inch FST screen for superb picture quality and has front mounted controls for power, brightness and contrast.

Also featured is a swivel base and rear controls for picture size and positioning,

Also included is a cable adapter which has a small built-in speaker and an audio connector which allows you to connect it to a hi-fi system.



**ONLY
£104.99**

Trackball

Ever fancied a mouse alternative, but been put off by poor trackball designs? Well, we've found the answer - the Legend Ball.

This 320 dots per inch trackball has been ergonomically built, putting all controls within easy reach of your fingers and featuring a smooth platform on which to rest your palm.

While the mouse pointer is controlled by your thumb, item selection can be made easily without removing your hand from the device.

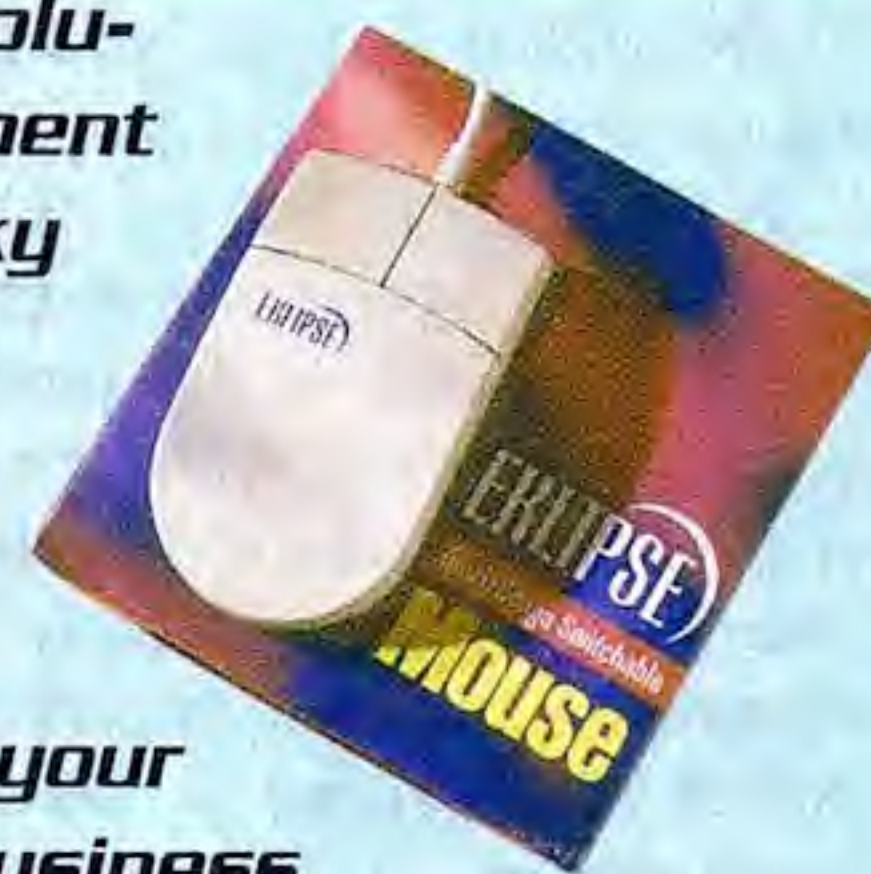


**ONLY
£24.99**

Mouse

This high resolution replacement for the chunky and sluggish Atari mouse is perfect for use alongside all your leisure and business applications.

Switchable between ST and Amiga use, the stylish Eclipse model features micro-switch technology to give smooth operation, easy use and durability.



**ONLY
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Memory

With more and more memory-hungry programs being launched for Atari computers, there's never been a better time to upgrade yours.

Extra memory will enable you to play the most exciting simulation games, use powerful graphics drawing programs or even design colourful pages with the latest publishing software.

We've put together options for all types of Atari enthusiast - and with the STFM boards you'll be able to extend the memory up to 4Mb of memory at a later date.

They're all at really competitive prices, with a service available for buyers who don't feel confident to fit the upgrade themselves.

**FROM
£8.99**

512k STE.....	£8.99
STE to 2Mb	£49.99
STE to 4Mb	£99.99
512k STFM	£29.99
STFM 2Mb.....	£74.99
STFM 4Mb	£129.99

GREAT WAYS TO UPGRADE

External drive

An external floppy drive which plugs straight into the back of the ST can benefit every type of user - from games player to publisher.

Disk copying is faster and easier once a drive has been fitted, and there's no need for inconvenient disk swapping when using powerful software.

The advantages of owning a second drive - and what better way is there of expanding your system than choosing this bargain-priced but high quality device?

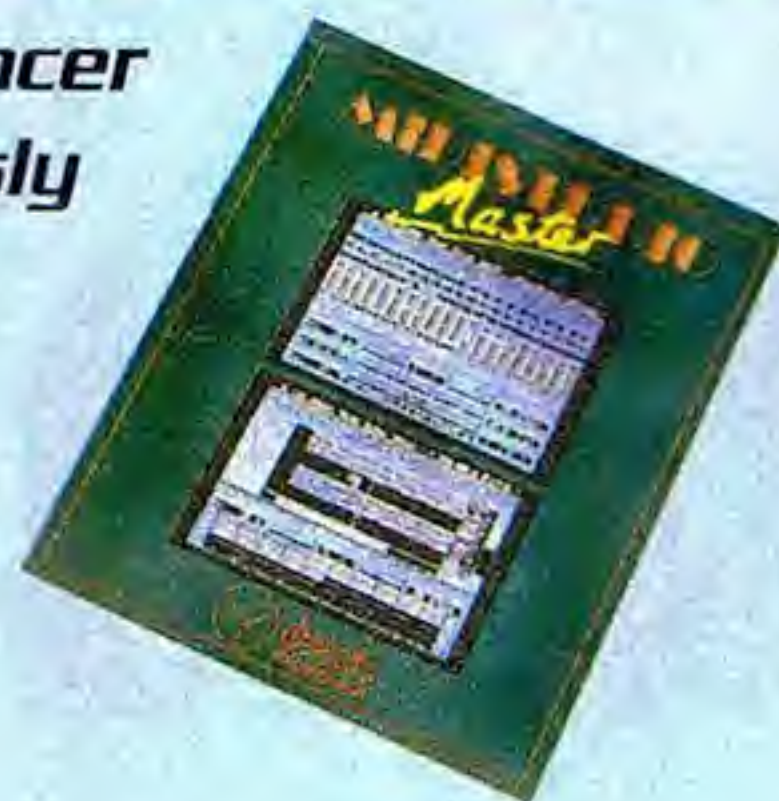
**ONLY
£57.99**

ively presents

saving ways to stretch your ST's limits...

Midi Studio Master

This Midi sequencer - which previously sold for £99 - enables you to turn your ST into a fully-fledged music controller.



With this software and compatible synthesiser keyboard you can write, store and playback stunning compositions just like the professionals.

Its features include 100 track storage, 240 PPQ resolution, Midi standard file compatible, real-time mix-down via mouse, real-time scrolling arrange window and pipeline module system.

**ONLY
£9.99**

Internal Drive

Imagine the advantages of upgrading a single-sided floppy disk drive to a double-sided version.



If you're still using the old style single-sided drive, then you'll have already found that most of the latest software doesn't work with your ST. Replace it with this internal model and you'll be able to run all programs, including your existing collection, and have double the storage capacity on every disk.

The drive is easy to fit but because official Atari drives are no longer available, some small alterations will be needed to the ST's case.

**ONLY
£39.99**

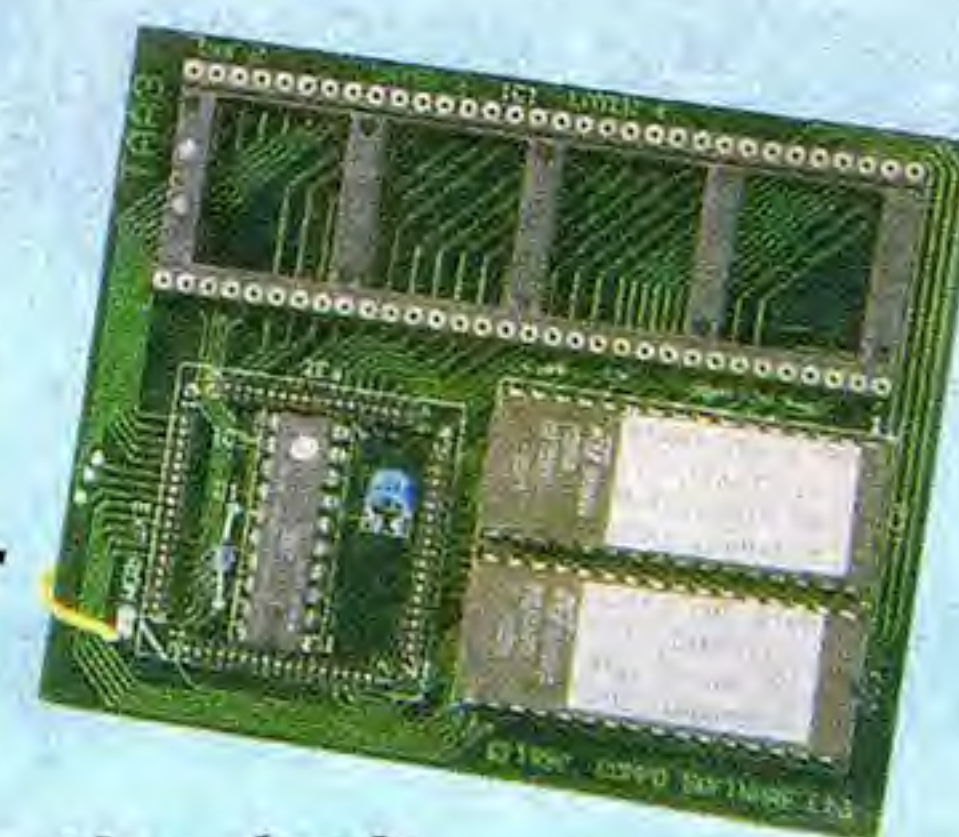
TOS upgrade

Give your ST the extra features and improvements of the latest operating system but keep compatibility with all your existing programs.

With TOS 2.06 you'll be give your computer a brilliant new look, and have the ability to put frequently used folders and files onto the desktop for easy access.

Extra icons are available for folders and hard drives, keyboard shortcuts make control easier, the desktop's colour can be changed and GEM programs set to run automatically.

Its support for high density floppy drives is just another reason why this bargain upgrade is right for you. A fitting service is available.



**ONLY
£59.99**

Fitting and return delivery

We realise that many ST owners would love the power offered by extra memory or the latest operating system but are put off by the prospect of fiddling about inside the computer.

This is why we've teamed up with a leading Atari dealer who for a small extra charge will

be able to fit memory and TOS upgrades, and even arrange for your machine to be sent back.

If you choose this service please don't send you computer just yet - once we've received your order an Upgrade Centre representative will arrange a convenient appointment time.

UPGRADES ORDER FORM

Fill in this form and send it to Upgrade Centre, Europa House, Adlington Park, Macclesfield SK10 4NP

**ATARI
ST USER**

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|---|---|
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| <input type="checkbox"/> STE memory to 2Mb.....£49.99 | <input type="checkbox"/> Trackball.....£24.99 |
| <input type="checkbox"/> STE memory to 4Mb.....£99.99 | <input type="checkbox"/> Midi Studio Master.....£9.99 |
| <input type="checkbox"/> 512k STFM upgrade.....£29.99 | <input type="checkbox"/> Joystick.....£2.99 |
| <input type="checkbox"/> STFM 2Mb.....£74.99 | <input type="checkbox"/> TOS 2.06 (STE).....£59.99 |
| <input type="checkbox"/> STFM 4Mb.....£129.99 | <input type="checkbox"/> TOS 2.06 (STFM).....£59.99 |
| <input type="checkbox"/> Internal floppy.....£39.99 | <input type="checkbox"/> DataView Hi-res mono monitor..£104.99 |
| <input type="checkbox"/> External floppy.....£57.99 | <input type="checkbox"/> Fitting and return delivery.....£19.99 |

Please add £1 per item for postage and packing within mainland UK - for overseas telephone the Upgrade Centre on +44 772 203166. All products only available while stocks last

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Please do not send your ST to the above address. The Upgrade Centre will contact customers requesting the fitting service with full address and booking details.

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Last month's article, which featured a list and a brief description of various Atari patches, has resulted in a lot of good feedback from our readers.

But it seems that there was a fair amount of confusion out there as to which patches were needed for which machines and what these programs actually did. As a response to this positive user reaction we have decided to actually include a few patches on this month's disk taking into account reader wishes.

Since the number of these programs is quite large and could easily fill the whole disk, we had to concentrate on only a few. The ones we've selected cure some of the more common problems, so are hopefully the most useful.

FOLDRnnn.PRГ

This patch was written by Atari themselves and was one of the first patches for the ST. It fixes the 40-folder problem by adding memory to the OS pool and so provides for more folders.

As its name suggests, the bug occurs when more than 40 folders are accessed. When this happens the computer locks up. If the machine is not reset the screen often goes white with vertical lines.

This is the OS going wild and wiping out memory, eventually reaching screen memory. In newer TOS versions the system terminates gracefully with the following message:

```
*** OUT OF INTERNAL MEMORY***
USE FOLDR100.PRГ TO GET MORE
```

This problem and its fix became more prevalent with the advent of hard disks. Atari actually does not admit this as a bug, preferring to see it as a system limitation which needs to be extended as requirements change.

FOLDERS

Installing the patch involves renaming it and replacing the 'nnn' characters with a number indicating how many folders the system should allocate memory for.

This method of using a program's name for configuration was subsequently copied by many other patches. Once its name has been changed, the program should be copied into the AUTO folder and that's all there's to it. Next time the computer boots, the new FOLDR setting will be active.

CACHEnnn

Depending on how one defines the word bug this program may also be described as a system enhancement. It adds cache buffers to TOS' starting with the RainbowTOS. This is another program written by Atari.

Every time a program needs to access

Patch as can

Don Maple's
guide to this
month's
CoverDisk
Patch programs

a file it must first find out where it is. This information is read from the directory and FAT tables. CACHE speeds up this process by several orders of magnitude by keeping the required information in memory.

Next time a program needs the information, it can access it almost instantly and doesn't need to move the read/write head back and forth all the time.

There are actually two types of buffers in CACHE. F holds FAT and the root directory while D holds the data and

subdirectories. CACHE is configured in a similar manner to the FOLDR program by changing the 'nnn' characters to a number indicating how many buffers should be allocated. Renaming it to CACHE100 for example will allocate 100F and 100D buffers.

If you wish to have a different number of F and D buffers the program should be renamed TTP.

On the parameter line type the number of desired caches prefixed with

HSMODA04

Atari always seem to have had problems with serial ports as all TOS versions have some bug or other in this area. A number of patches have been written over the years to remedy this both by Atari themselves and by independent programmers.

HSMOD is a complete replacement for serial routines in the Atari and can be used across the whole range. To this end a number of different programs are supplied which sometimes leads to confusion.

The lack of English documentation in the past didn't help either, although today each document contains an English section as well.

The reason for numerous programs is that HSMOD uses modular drivers. Each serial port or chip has its own driver. The program that actually loads the relevant drivers is called DRVIN.

The first thing to do before using HSMOD is to determine the type of comms chips you have in your computer and use the corresponding drivers. This can be determined from the following list:

ST, STE, MegaST	MFP.PRГ
MegaSTE	MFP.PRГ, SCC.PRГ
TT	MFP.PRГ, SCC.PRГ, MFP_TT.PRГ
Falcon	SCC.PRГ

Next, the chosen drivers must be configured. A somewhat unusual method is used for this; the programs themselves are modified and then saved with the new values already in place. The author, Harun Scheutzw, expresses his dislike of numerous small INF files preferring to directly modify the program.

All files are configured with the SETTER program. It can be run directly and the driver name is then typed in as a parameter. Alternatively, the driver icon can be dragged on top of SETTER in more recent versions of TOS. The program automatically recognizes it and which variables can be set.

In case of MFP.PRГ the following values are recommended:

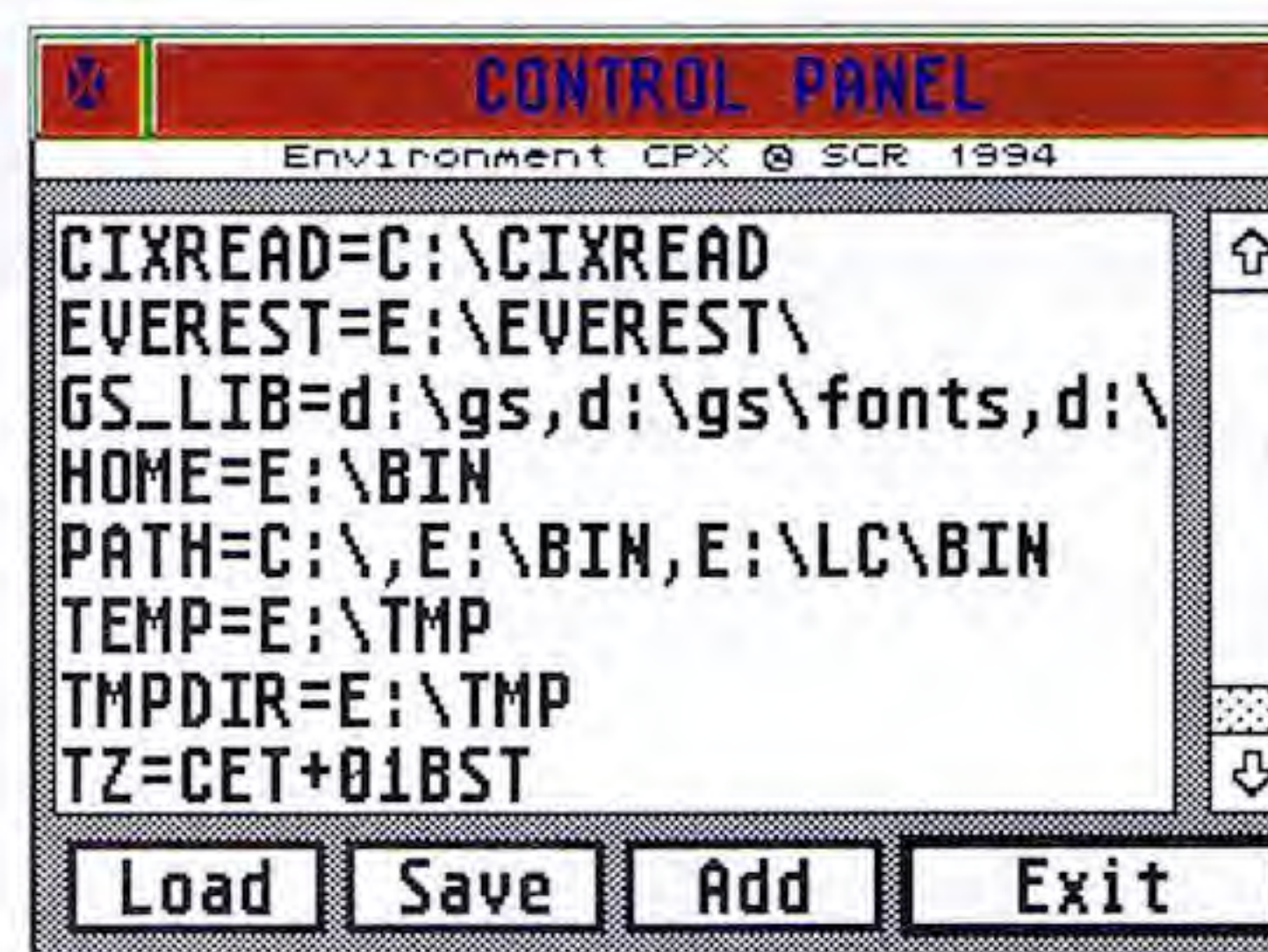
RSVE: n (applies only to RSVE customized computers)
HISP: n (same as above)



a letter F and D respectively. It's much easier to change the program's name and simply copy it to the AUTO folder.

ENV

A program's environment is, as its name suggests, the surroundings in which the



REPL: u (repeat six times, again related to RSVE)
DTR: y (maintains TOS compatibility)
RBL: [receiver buffer size]
TBL: [transmitter buffer size]

The last two entries can contain values from 16 to 65534 where 256 is the standard system setting. Normally, the larger the buffer the faster the transfer.

In case of SCC.PRГ the following values are recommended:

PCLK: n (applies only to modified computers)
M2TT: y (same as above)
DTRM2:y (maintains TOS compatibility for modem port)
DTRS2:y (maintains TOS compatibility for LAN port)
RBLM2: [receiver buffer size for modem port]
TBLM2: [transmitter buffer size for modem port]
RBL2: [receiver buffer size for LAN port]
TBL2: [transmitter buffer size for LAN port]

The last four entries, like in MFP.PRГ, can be set to between 16 and 65534 bytes where 256 is the standard system setting. The larger the buffer, the faster the transfer should go.

RSVE (MFP) and ESCC (SCC) are hardware modifications to increase communication chip speed. These are popular in Germany but virtually unknown elsewhere. The recommended settings above assume these aren't installed.

For both MFP and SCC the very last question should be answered with a 'y' to save the configuration in the program. All that is left now is to copy the DRIVER program into your AUTO folder followed by all relevant driver programs. To make HSMOD operational the computer must be restarted.

HSMOD is both MiNT and MagiC compatible. In case of MiNT it should run after MINT.PRГ in the AUTO folder.

program runs. This environment is specified using so-called environment strings. In theory these can specify anything of interest which various programs wish to communicate to each other. The operating system for example has an environment variable PATH= which specifies the default system paths, normally A: and C:. This means, for example, that if a program can't find a resource in its default path it makes another try in the default system paths.

ENV.CPX program by Simon Robins was written to help add or change these environmental variables. In order for it to run you must have the Control Panel accessory active. The ENV.CPX program should simply be copied to the folder where you normally keep the CPXs. After rebooting, the machine ENV will appear in the Control Panel.

Clicking on the CPX will show all currently set variables. These variables are stored in a file called ENV.INF which is created automatically by ENV.CPX by clicking the Save button.

BMAPFIX2

And last but not least, welcome to the Falcon corner. We couldn't end without supplying something for the bird.

One of the side effects of new hardware is that software sometimes doesn't find what it expects to find. For example, older Ataris use two different communications chips, the MFP and the SCC. Although Falcon contains both, the MFP can't be used for serial communications.

MULTIPLE

With the introduction of the second chip, the SCC, Atari also came up with a method of distinguishing between the two and handling multiple serial ports.

This was done by mapping the chips using a system call called Bconmap. Different ports were assigned different numbers using internal tables.

On the Falcon where MFP was disconnected this created a "hole" in the table which causes problems when attempting to change the serial device. In short, such an attempt would basically disable serial communications until the computer is rebooted.

BMAPFIX2 not only fixes this but also emulates the missing MFP chip. This is very useful when running older comms programs which are unaware of the new SCC chip or do not provide a way of switching back.

Atari have also attempted to solve this problem but their own FPATCH1 was totally ineffective.

Instead BMAPFIX (1) used a different method which Atari subsequently incorporated into FPATCH2. Finally, BMAPFIX2 leapfrogged again by going a step further and emulating the missing MFP connection in software.

BMAPFIX2 is very easy to install as it can either be stashed in the AUTO folder or simply run from the desktop.

Even though the Falcon is an impressive machine right out of the box, hardware tinkerers the world over are never satisfied.

This applies especially in Germany where there was always a tendency to keep improving both the ST and its system software.

It's almost impossible to find a "virgin" ST or Falcon in Germany. As soon as the machine has been purchased, all sorts of modifications are made to it even before the packaging hits the floor.

Both the eager users and innovative developers seem to feed off each other and the borders between them often blur as today's tinkerer is tomorrow's Atari entrepreneur!

This is quite evident from a myriad of hardware add-ons and home-grown operating systems which emanate from this part of the world. To get an insight into this scene we paid a visit to Werner Frey, an "average" German Falcon user.

UNDERSTATEMENT

In this context, the word "average" is really an understatement which becomes patently obvious just by looking at Werner's Falcon. In its full size tower case, it looks more like a high-end workstation than Atari's bird of prey. But it's a good illustration of what almost all German users do to their Falcons though perhaps not to the extent Werner did it.

But Werner wasn't always an Atari fan. His first encounter with micro computers was back in 1982. A company where he worked used an Apple II as a measuring instrument. This fuelled his interest as he spent many of his lunch hours playing around with the machine.

He would also stay after work to get his first taste of Basic. But it was the taste of beer that his first program was all about.

At an office party, the computer running Werner's program was placed next to the bar. On the screen was a notice to press space every time a glass of beer was removed. The computer would then respond with the number of beers remaining, to the amusement of every-

body and prompting the boss to remark: "Nothing in this company works but a program like this works flawlessly!"

Having decided to get an Apple, Werner was then faced with its prohibitively expensive price. However, as an electronics engineer he knew which was the hot end of the soldering iron, so he purchased a blank Apple-compatible motherboard and soldered all the chips himself. The keyboard was salvaged from a typewriter and a cassette deck was used for storage.

The whole contraption sat on his desk without a case but Werner had it for a

long time and learned many important programming concepts on it.

After a brief flirtation with a Commodore 116 and another Apple, a friend of his told him about this new computer called Atari ST.

It was love at first sight, especially when he compared it to the slow and cumbersome PC at work, so in 1987 Werner got his first ST.

Right off the bat he soldered a piggy-back RAM upgrade to 1Mb, followed shortly by a couple of double-sided floppy drives. The ST case was soon far too limiting, so Werner moved the ST to

Spread your

Don Maple visits an
"average German Falcon
user" who has made his
machine fly to even
greater heights with a
series of DIY upgrades

a PC tower case, adding a 4Mb RAM card and a hard drive. But the mobile ST didn't stay there for very long as Werner moved everything to a small wooden cabinet.

The handy part here was that one side of this cabinet was a door providing easy access for further tinkering!

ENAMOURED

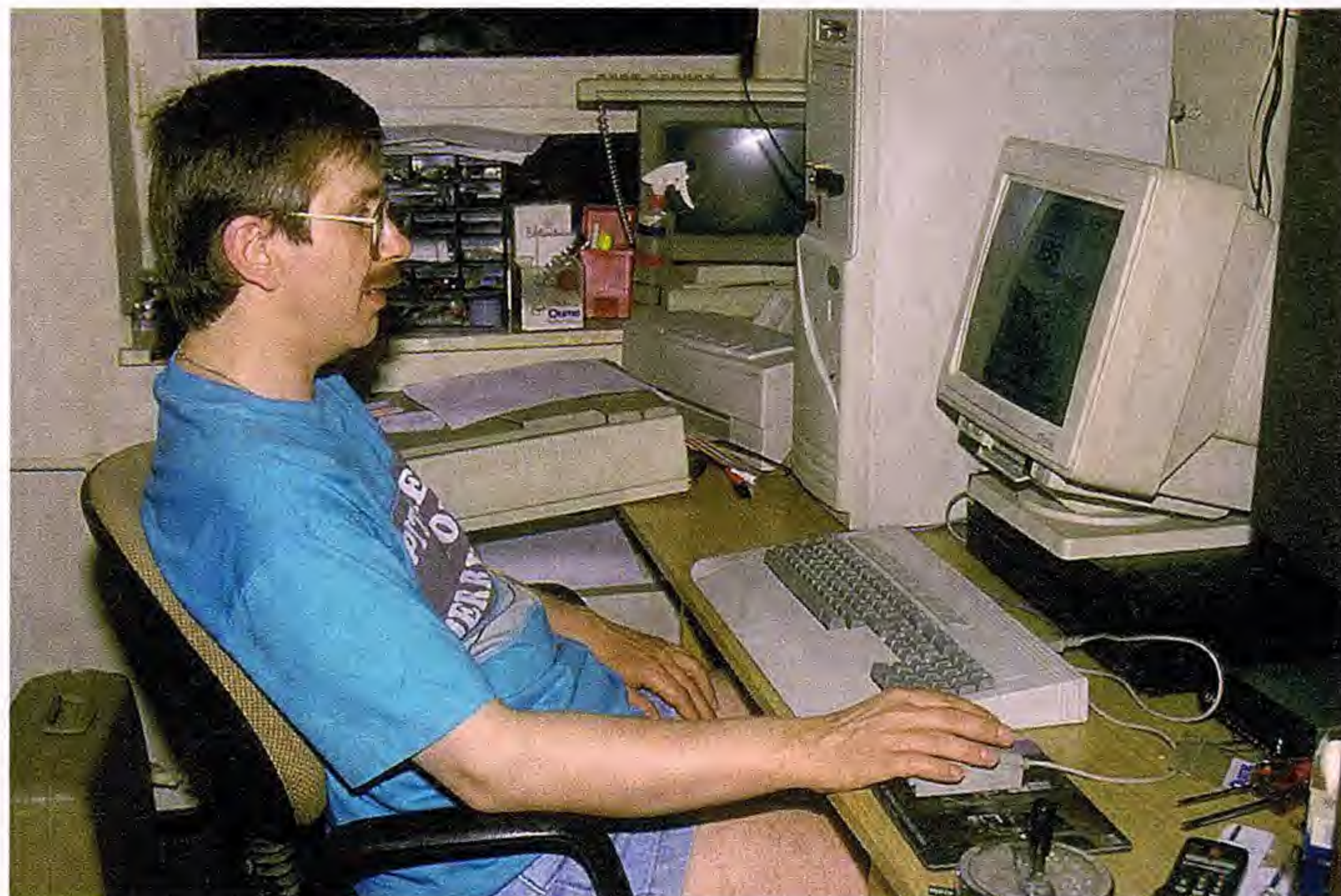
However, wives of computer aficionados – often called computer widows – are not usually as enamoured of the machines as their husbands are. This was the case with Werner's wife Gudrun, so in order to win her over he showed her some games and pretty soon she was



This may look like a work station but it's a Falcon, all right!

Inside information

- Falcon030 with 4Mb ST-RAM 68882 FPU coprocessor accelerated to 33MHz
- Mighty-Sonic 32 MHz accelerator with 20Mb FastRAM
- Full-size tower case
- Detachable Rhotron keyboard
- ScreenEye+ real time video digitizer/60Mb AT-BUS hard disk (replaces Falcon's 65Mb)
- 425 Mb-SCSI hard disk
- CD-ROM, Toshiba XM 4101 B
- ScreenBlaster graphic enhancer
- Qume QM 865 LRM multiscan 15" monitor
- Qume CrystalPrint SuperSeries II, LCS printer (HPLJ 2)
- Canon BJC 600 colour bubble jet printer
- CSR1496 14.4 Kbaud modem



Werner Frey, at his upgraded Falcon

hooked too. This resulted in her own 1040 which Werner upgraded to 2.5Mb and TOS 2.06, as well as installing two small hard drives.

Marital bliss followed and today the couple attend assorted computer gatherings together, such as MidiMaze parties.

And so we come to the Falcon. Werner saw the machine for the first time at the legendary Atari Dusseldorf show. Visiting the show with a bunch of program disks in his hand, he tested how compatible the bird was with older STs.

Needless to say, the Falcon passed this test to his satisfaction and he placed an order as soon as it was possible.

As we all know now, Atari had shipping problems in the beginning but in April 1993 Werner got one of the first commercially available Falcons in Germany.

Used to a 200Mb hard disk in his old ST, the little 65Mb drive in the Falcon



Once an image has been digitized it can be further processed with DA Picture, such as this peek inside Werner's Falcon

well as output a variety of both video and sound signals – six for video and five for sound.

Werner continuously monitored new announcements for Falcon-specific hardware, so as soon as the video digitizer

wings

was a downgrade for Werner so the first thing he got for the new machine was a 425Mb SCSI drive. He eventually replaced the internal Falcon hard disk with a 160Mb model too but the first real Falcon upgrade was the Screen Blaster resolution enhancer which extends the Falcon's resolutions.

This utilized the attached multiscan monitor to its fullest.

Even though the Falcon runs at 16MHz and as such is twice as fast as a standard ST this was too slow for Werner, who was used to the PAK2 accelerator in his old ST. The next upgrade was therefore Mighty Sonic.

This 32MHz accelerator plugs into the Falcon's internal expansion port. The card also has room for fast RAM, that is to say RAM which is not shared with the video circuitry. In Werner's Falcon this card has 20Mb worth of chips which is as far as it goes.

SPACIOUS

All this made the space inside Falcon rather tight, so the bird "moved house" and nested within a comfortably spacious full-size PC case.

Naturally, an external keyboard for such a setup was a must. In the meantime, a number of hardware modifications have surfaced, many from Atari and others from independent developers, to smooth over some of Falcon's rough edges.

Werner has done all of these himself and added a few of his own, such as removing all RAM wait states and installing a special piece of reset hardware to get around timing problems.

He also built a complex input/output switchboard on the case to feed in as

ScreenEye was available he ordered one. This digitizer connects to practically any video source from a camera and a video recorder to a live TV signal. A CD-ROM was the next natural upgrade as was the Canon bubble jet colour printer. Some of the Falcon hardware Werner installed was so new that he often advised companies of any conflicts with other products.

CAPABILITIES

But all of this hardware doesn't just sit there. Werner's setup includes so much software to show off the capabilities of the Falcon that it leaves many a PC owner with a floppy lower jaw. Among other software running on his Falcon is Calamus ST, DA Picture and DA Vector.

He also vectorizes graphics captured on his A4 scanner with Avant Vector; the Falcon is not just a hobby for Werner, he also does some publishing work for a company where he has his day job.

The company shows the bias all Atari owners everywhere are very familiar with



Werner's Desktop enhanced with the help of the ScreenBlaster to run in 880 x 656 pixel resolution

Benchmarks

The MightySonic accelerator as well as various other improvements such as the accelerated FPU floating point coprocessor and zero RAM wait states all combine to make Werner's Falcon run almost five times faster.

GEM Bench v3.40 Ω Ofir Gal 14.1.94

Falcon 030 TOS 4.02, MiNT not present
Blitter Disabled, NVDI 2.50 present
Video Mode = 640 * 480 * 16 Colours
LineF FPU installed
Run and Malloc from FastRAM
Ref = F030, 640*480*16

GEM Dialog Box:	1.610	313%
VDI Text:	0.510	1041%
VDI Text Effects:	1.540	721%
VDI Small Text:	0.705	735%
VDI Graphics:	2.995	400%
GEM Window:	1.285	182%
Integer Division:	1.545	201%
Float Math:	0.330	1862%
RAM Access:	0.980	255%
ROM Access:	0.980	239%
Blitting:	4.565	80%
VDI Scroll:	4.100	171%
Justified Text:	2.655	219%
VDI Enquire:	0.455	417%
New Dialogs:	2.145	284%

Graphics: 414%
CPU: 639%
Average: 474%

but can never get used to. The shop is more than happy with the work Werner does on his Falcon, but are unwilling to purchase one themselves because their computer purchases are limited to PCs.

However, they are satisfied with the work done on the Falcon because, after all, the reason Werner does this work at home is because Calamus is more capable than the Page Maker at work!

Werner is also active around various BBS' and regularly attends the local Maus node (German BBS network) get-together at a pub, where he sometimes video tapes the proceedings.

The following day these are then available as digitized files on the board! Tuesdays, Werner also plays host to a few close friends to demonstrate the latest Falcon hardware and software.

ANALYSER

Future plans involve getting more into sound. Werner used to build speakers and one of the things he wants to do now is use the Falcon as a spectrum analyser. This would then help fine tune a speaker to any room.

He's also eagerly awaiting the Afterburner, a 68040-based accelerator, and FalcoGen, a high-end professional genlock both due out any day now.

The bottom line is that for as long as ingenious Falcon developers keep coming out with innovative new hardware and exciting software, there are plenty of things to do with our favourite bird.



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AND MUCH MORE

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September 22



I've never thought of any program as male or female but the author of a new commercial text editor from Holland seems to have no doubt as to his program's gender – even to the extent of calling it Edith. Well, it may be a pretty program but it's a text editor as far as I'm concerned.

Text editors are vital utilities for most people, especially if you're halfway serious about your computing, and this is probably why there are so many around.

Most of them are public domain or shareware programs, though, and commercial editors are few and far between.

I'm a dedicated EdHak user – it's fast, convenient and comes either as an accessory or as a standalone program – but I'd be the first to admit that as far as bells and whistles go, it's hardly over-decorated.

Edith is different kettle of fish. It has one of the most attractively designed interfaces I've come across in a long time and some highly original editing features.

It is particularly good looking when run on the Falcon or under MultiTOS and makes good use of 3D buttons and dialogues.

FEATURES

Edith works with both MultiTOS and Geneva and has some special features that work with the replacement desktop Gemini, including drag and drop onto the open text window. Edith even adapts itself to smaller screen modes including ST low resolution.

Edith can be installed as a standalone program or as an accessory, and can be installed as an application to edit any double-clicked text file with a recognised extension.

If installed as a desktop icon, on TOS 2.0x or later machines, text or binary files can be dragged onto the icon and automatically opened when the program runs.

Edith features its own graphical user interface, including a desktop and comprehensive menu bar. There is also a function key bar similar to that in Firstword Plus and text windows and dialogues can be iconised on the desktop for easy access. Up to six texts can be open at once but if more are needed they can be remembered using Edith's unique queuing feature.

There are several different types of text window, including default and alternative text windows, a notepad, binary windows, and a trash can cum clipboard. Text windows can contain a menu bar

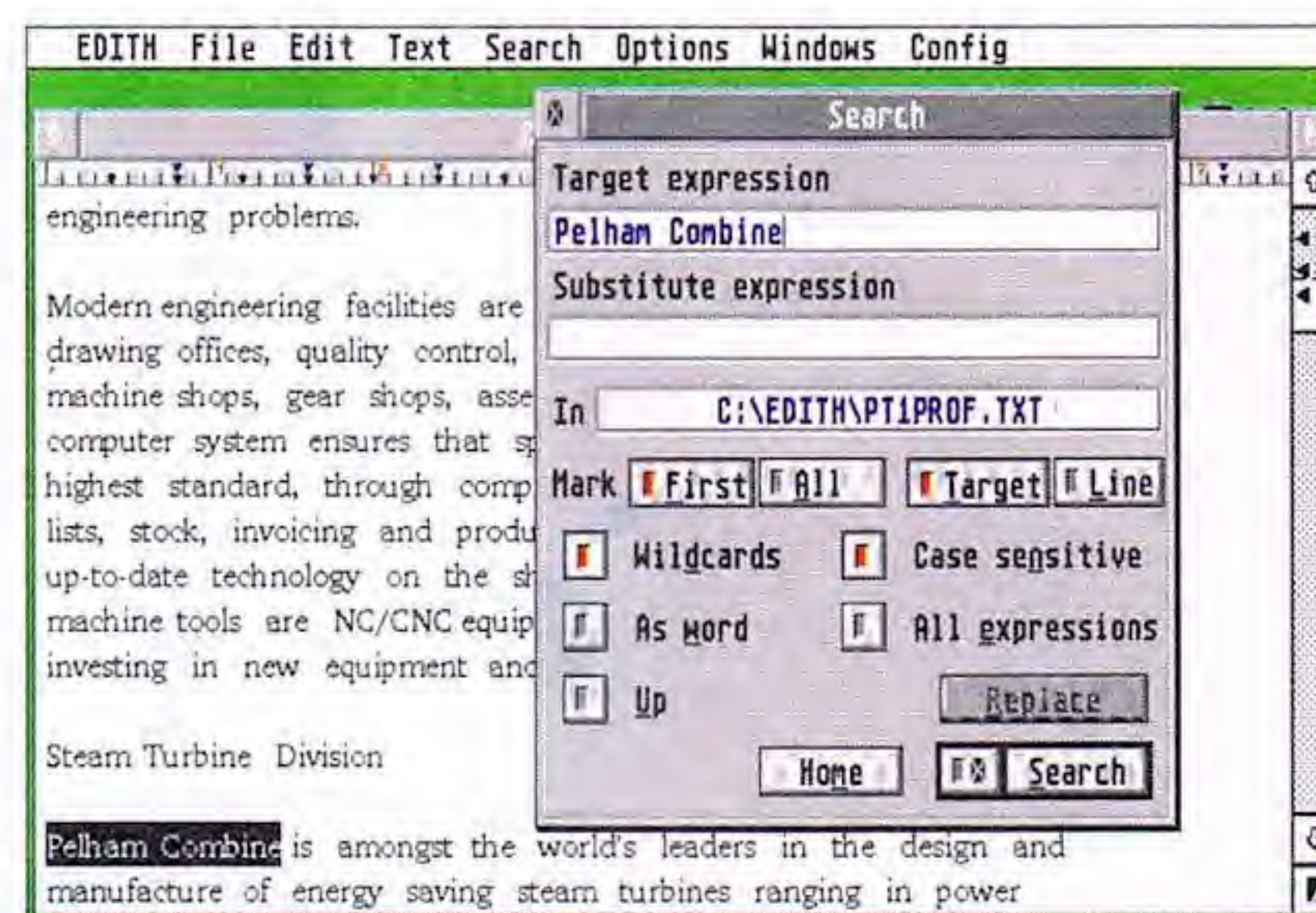
identical to the main one, a text ruler with information box and vertical scroll bars, although Edith permits a high degree of configurability so the window menu and scroll bars can be turned off if necessary.

Each type of window can have a different colour scheme too, such as the popular white text on blue background in colour modes. Edith includes a number of bitmapped system fonts and can use any other installed system font such as scalable SpeedoGDOS outlines.

Both modal and non-modal dialogues are used by Edith and the non-modal variety can be fixed on the desktop so that it remains open while you work. Keyboard shortcuts take up several pages in the manual and the list is one of the most comprehensive I've seen.

In fact, there are no less than 170 keyboard shortcuts listed in the manual though many are non-standard at present.

When loading and saving files, Edith



Search and replace is very advanced

Andrew Wright tries out a pretty new text editor with some neat features

A real

has its own windowed file selector but lovers of alternatives can disable the feature and use others such as Selectric or UIS.

The Edith selector offers access to all the menu commands via its own menu bar, as well as sorting files in the list, file masks, deleting files, creating new folders and providing attribute information.

FLEXIBLE

When editing text, Edith is fast enough for most users but not as fast as Tempus and one or two others I could mention. It is highly flexible, though, and provides a well-thought out set of commands for navigating through text files and deleting characters, words and lines.

The numeric keypad can be configured to work like a PC keyboard, doubling as up, down, left, right and diagonal cursor keys. Edith has a unique indentation

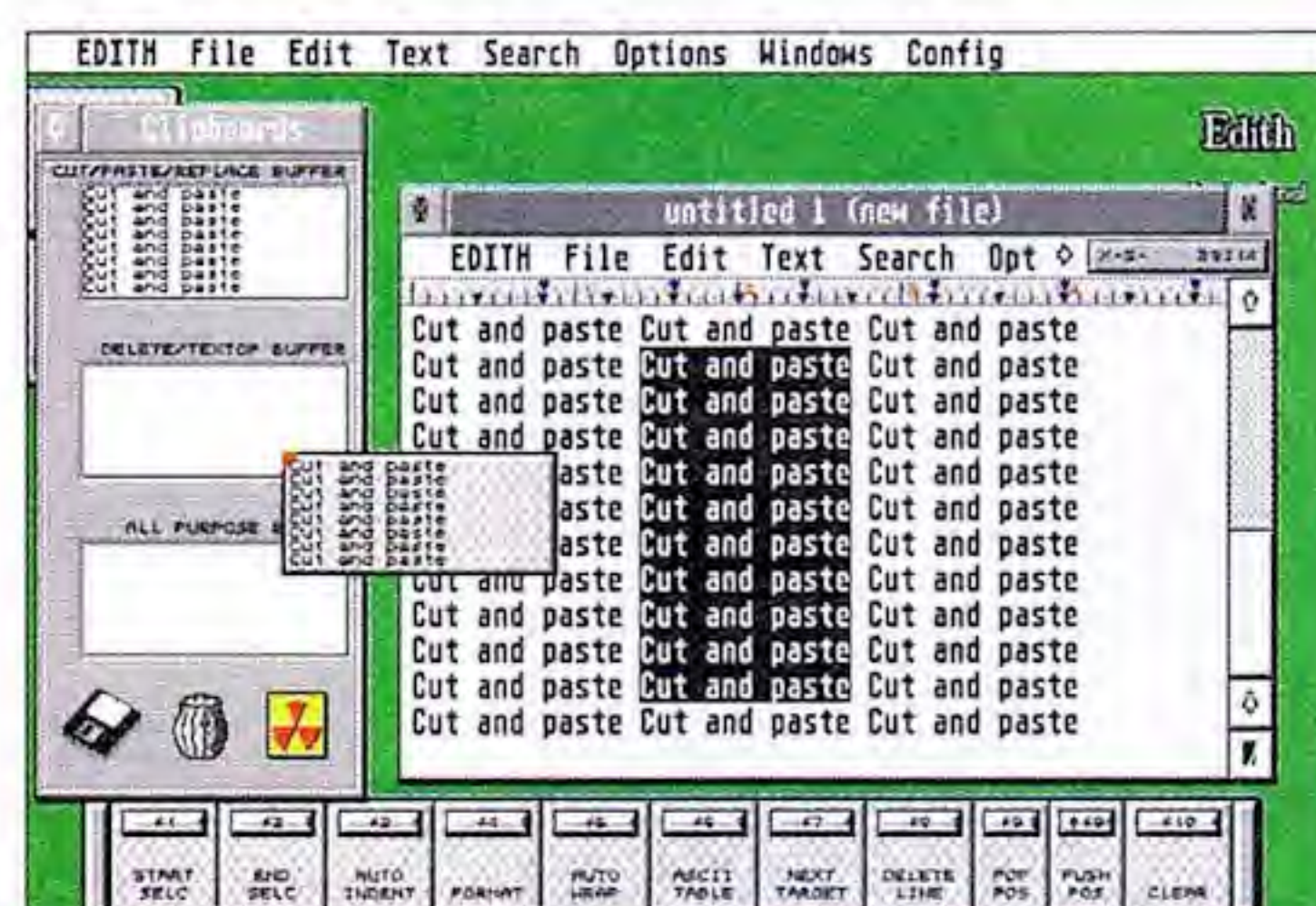
system with two types of tab markers, true (ASCII code 9) tabs and its own editor tabs.

Edith allows a different method to normal editors, where hitting the tab key inserts a tab character. Instead Edith can insert a number of spaces into the text to take the text to the next editor tab stop.

The advantage of this system is that tabs are always displayed correctly and the smaller editor tab spacing is more convenient for working on tables and tabulated text.

The Esc key is used to remove indents by moving text back one tab space, while the program also has an auto indent mode to make life easier when indenting consecutive lines of a program. Edith also has some very powerful cut and paste facilities.

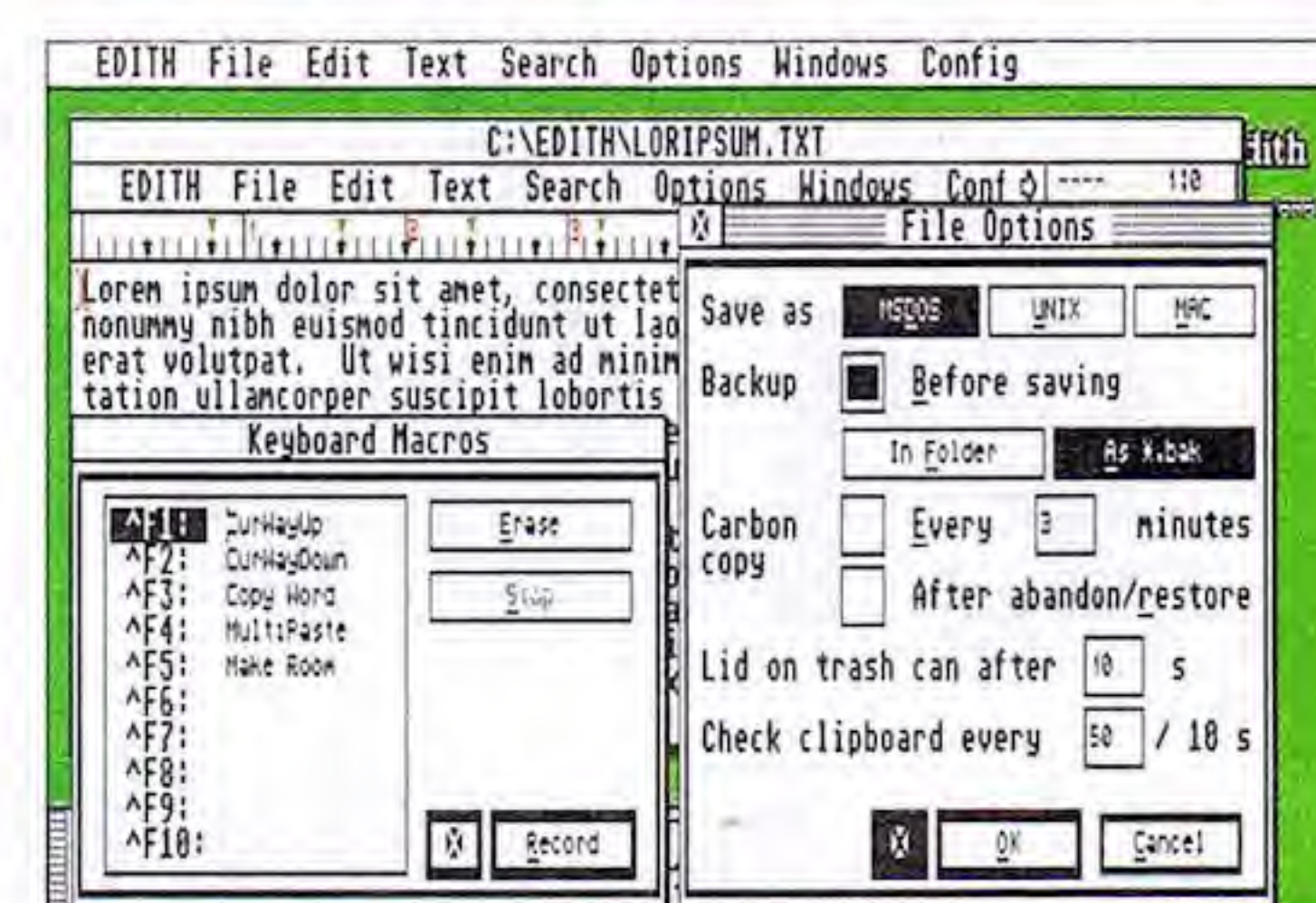
Text is selected using the mouse and highlighted blocks can be dragged onto the buffer and back again to another posi-



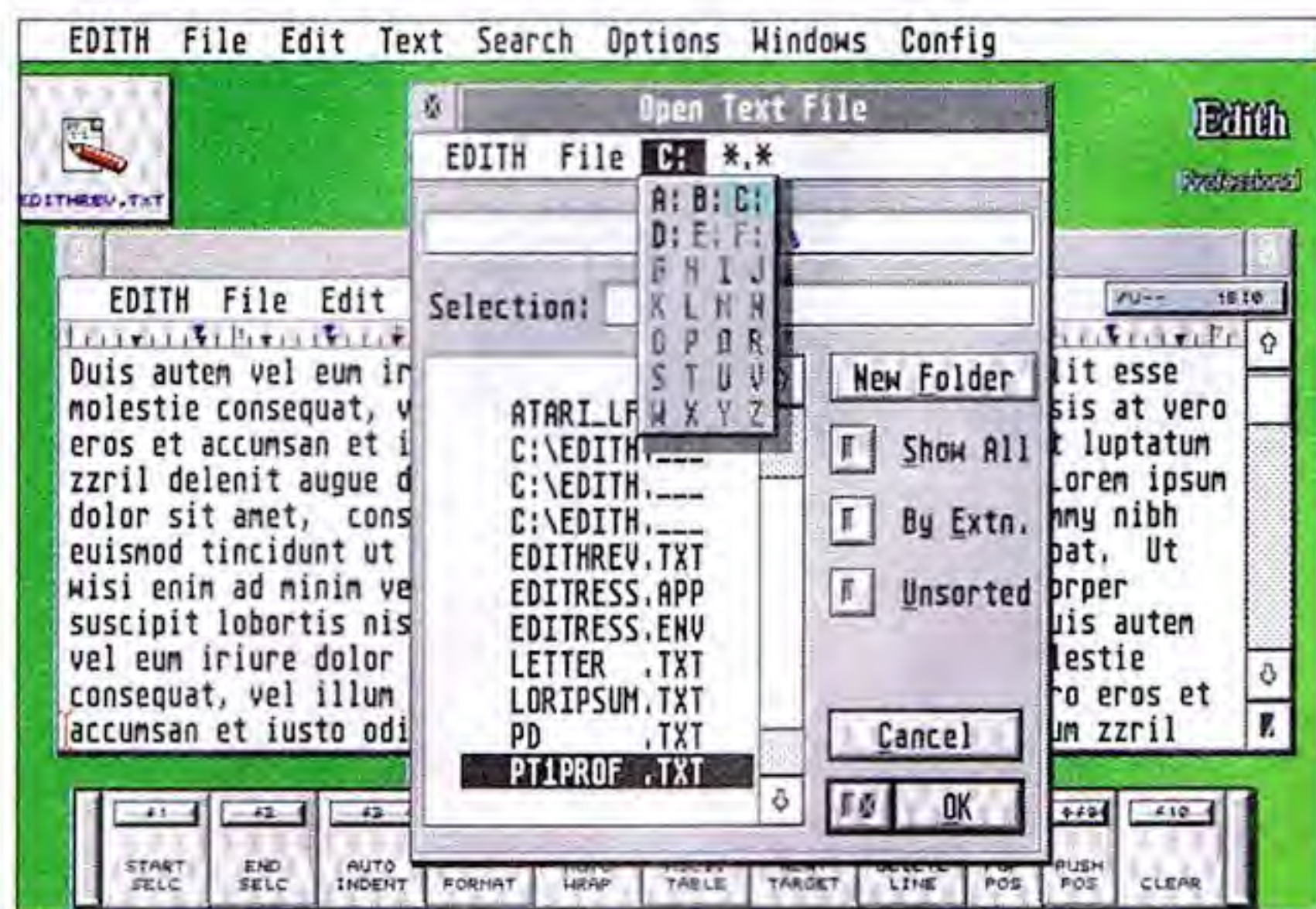
Drag and drop text manipulation adds to the professional feel



Kurzels let you assign commonly used text strings to abbreviations that are expanded by pressing Esc



You're unlikely to run out of options in Edith



Edith has a custom file selector

tion. There are three buffers – the cut/paste buffer, the delete/text operation block and the all-purpose buffer – and each is displayed in the clipboard window. Text can also be dragged from each buffer onto the shredder, trash can and disk icons, to delete or save the contents. A double-click selects a word,

lady

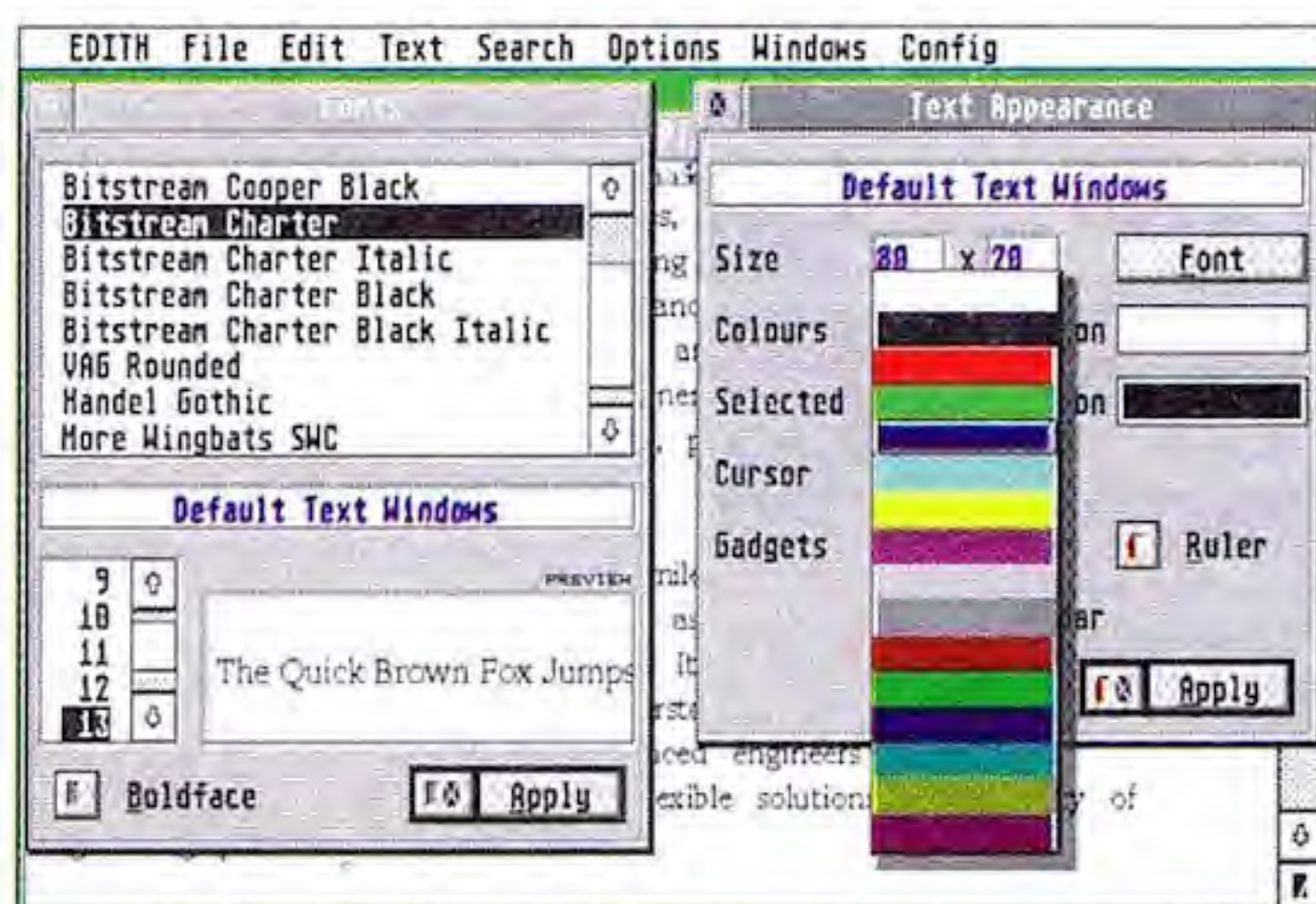
a triple-click selects a line and with a shift key held down, additional fragments can be added to the already selected text.

Columns can also be selected using the right mouse button too which makes Edith ideal for editing tables and forms.

There are two paste modes too, standard paste and overlay. In standard paste mode, text from the buffer is inserted at the cursor while in overlay mode, it is merged line by line with the existing text. This is very useful for manipulating tables and creating columns.

UNUSUAL

Edith's search and replace tools are particularly good – if a little unusual. There is no one step search and replace operation. Instead the program searches for all the matching text specified in the search dialogue and highlights it on screen. You then have the option of



You can choose from a wide range of display fonts

Going Dutch

Edith was developed and written by a Dutch company but is being distributed and supported in the UK by Graeme Rutt under the CIX Supported Shareware scheme. It is a commercial product rather than shareware but in practice it makes little difference – you try the PD demo and pay up if you like it.

The program itself is supplied on a single, serial numbered disk with a 66 page A4 manual. It includes a very user-friendly installation utility that asks simple questions designed to help you set up Edith on your hard drive or floppy setup with the minimum of jargon and fuss. It works on any Atari, from the early STs with TOS 1.0 to the latest models of the TT and Falcon. It even claims to be Medusa compatible and needs only the basic 512K of memory.

examining each occurrence or pressing Replace to carry out the complete operation. This flexible approach makes it easy to search for all occurrences of an expression, for example, and replace each one with something different. The program can even search for four target expressions at once and has some

looking results. The manual infers that the program will insert a blank line when reformatting text whenever it detects a paragraph separation, but it fails to do this completely, inserting blank lines in odd places and losing all previously entered paragraphing information.

There also appears to be a bug in the formatting logic that interprets a word with a comma immediately after it as being joined to the following word, resulting in strange line lengths when comma delimited lists are used.

MISHANDLING

Other problems included mishandling of screen redraws on start up, leaving the function key bar drawn in two different button colours (options are light, medium and dark coloured buttons) and messy file handling.

Edith persisted in leaving illegal files on my Falcon's internal hard drive. These files, each called C:\EDITH, appeared in the EDITH folder and two or three were added each time the program was run.

These nagging problems are a real shame. Edith is a wonderful looking program with a refreshing interface and style, and is a joy to use.

It handles binary files well and has some tremendous search and replace features, superb cut and paste facilities and an excellent all round look and feel. Unfortunately it is let down by some odd behaviour and buggy text formatting. Poor old Edith – I really could have fallen for her.

advanced and extremely powerful wildcard features.

Unfortunately Edith has some rather severe problems, mainly to do with text formatting. Edith does not like files without any existing text formatting characters – importing a text file containing no carriage return/line feed combinations at the end of each line repeatedly caused the system to hang when attempts were made at reformatting, even when smallish files were used.

Selecting the entire text and trying to apply the text format command caused the program to crash with two bombs.

Admittedly, the manual does warn of a dislike for large files but I certainly didn't exceed the two million lines and 16 MB file size that it mentioned!

CONCERN

The manual fails to cover the aspects of the program that cause concern – having read it cover to cover, I was no wiser as to what was causing the program to format text so badly.

Text formatting gets a single page and the format text command that can do so much damage to a text file warrants only three lines.

It does provide one clue to its puzzling behaviour – the scope of the command is the SE quadrant below and to the right of the cursor, so if you happen to press the format key when the cursor is halfway along a line, only the text below and to the right is formatted with some peculiar

BOTTOM LINE

FEATURES

Plenty of options to choose from – and plenty of "bugs" too

Excellent
Good
Average
Bad
Appalling

EASE OF USE

The stunning interface is wonderful but it remains a very complex program

Excellent
Good
Average
Bad
Appalling

VALUE FOR MONEY

The price is realistic – but not with the bugs

Excellent
Good
Average
Bad
Appalling

Product: Edith
Supplier: Graeme Rutt, 9 Fallow Drive, Eaton Socon, St Neots, Cambs PE19 3QL
Telephone: 0480 213223
Price: £35 (£22 until September 30th)
Configuration: Any Atari

As announced last month in EuroNews, Compo have been entrusted by Atari with further developing and maintaining SpeedoGDOS. Atari will keep all legal rights to the product but Compo were supplied with all sources and are hard at work on version 5.0.

The actual programming is being done by the "no" group of programmers, responsible for a number of high-end programs distributed by Compo. Atari User was given a sneak preview of the pre-release beta version of SpeedoGDOS 5.0.

GDOS, which stands for Graphic Device Operating System, removes the font handling from individual programs.

Instead, fonts are managed on a system-wide level, and instead of worrying about them individually all programs can dip into this system-wide fonts pool. An advantage of Speedo is that it's a vector font OS extension.

Basically fonts can be divided into two groups: bit-mapped and vector. The former are of a fixed size as each character is defined with its image representing which pixels are on or off.

Changing the size of bitmap fonts is hard and they appear "chunky" when enlarged. However, displaying them is fairly easy as the operating system only needs to copy them to the screen as they are.

MATHEMATICAL

Vector fonts on the other hand are stored as mathematical formulas. This means that more work is needed by the operating system to convert this into an image, but they are more flexible. Regardless of the size, they always maintain the same quality. Speedo solves the speed problem by using a cache which holds the calculated fonts images so that they can be quickly copied to the screen.

Naturally, font foundries – as font manufacturers are called for historical reasons (fonts were once made out of metal) – are very jealous of their creations. This means there are several incompatible proprietary formats including old Atari SpeedoGDOS which can only use Bitstream Speedo fonts. What's so wonderful about version 5.0 is that it opens up the world of two other font formats, TrueType and PostScript Type 1. These are not only often cheaper but there is also a huge pool of PD fonts.

Type 1 fonts are slightly slower than their TrueType equivalent. This is because of their internal representation.

ATARI'S SpeedoGDOS

5.0

weiter

Hooked

Don Maple sharpens his computer pencil and tries out a beta version of SpeedoGDOS 5.0

Type 1 uses Bezier curves which are calculation intensive but simpler and more elegant in representing characters, while TrueType uses B-splines which are in theory faster to calculate, but more curves are needed to achieve comparable quality.

NVDI

SpeedoGDOS 5.0 also supports NVDI directly and runs on all graphic cards. Last but not least, version 5.0 is provided with drivers for colour printers and can handle resolutions of up to 600dpi. Some of the new printers which are supported include HP Laserjet 4 in 600dpi, pretty

much all Epsoms and colour HP 500/550C.

Installing SpeedoGDOS 5.0 is just as easy as previous versions. The program must be copied to the AUTO folder and that's all there is to it. The program will become active after the computer is rebooted.

The two configuration programs, DRIVER and OUTLINE, have also been rewritten. The former is used to select and configure printer drivers while the latter does the same job for fonts.

The main task of the DRIVER program is to install, remove and configure printer drivers, while a separate path for the drivers can also be specified.

Fontpacket GOLD

Zapf Humanist 601
Zapf Humanist 601 Italic
Zapf Humanist 601 Bold
Zapf Humanist 601 Bold Italic
Zapf Calligraphic 801
Zapf Calligraphic 801 Italic
Zapf Calligraphic 801 Bold
Zapf Calligraphic 801 Bold Italic
Bodoni Book
Bodoni Book Italic
Bodoni Book Bold
Bodoni Book Bold Italic
Zapf Elliptical 711
Zapf Elliptical 711 Italic
Zapf Elliptical 711 Bold
Zapf Elliptical 711 Bold Italic

Bodoni
Bodoni Italic
Goudy Old Style
Goudy Old Style Italic
Goudy Old Style Bold
Goudy Old Style Bold Italic
Goudy Old Style Extra Bold
Poster Bodoni
Poster Bodoni Italic
Broadway
Zapf Humanist 601 Demi
Zapf Humanist 601 Demi Italic
Zapf Humanist 601 Ultra
Zapf Humanist 601 Ultra Italic
Hobo
Hobo

STENCIL

Book Script
Impress
MARINUS
Patriot
Virena
GOTHIC BLADE
University Roman
University Roman Bold
Bauer Bodoni
Bauer Bodoni Bold
Bauer Bodoni Bold Italic
Bauer Bodoni Bold Condensed
Bauer Bodoni Black
Bauer Bodoni Black Italic
Bauer Bodoni Black Condensed
Bitstream Cooper Black Headline
Bitstream Cooper Black Italic Headline

Park Avenue

Bitstream Cooper Light
Bitstream Cooper Light Italic
Bitstream Cooper Medium Italic
Bitstream Cooper Bold
Bitstream Cooper Bold Italic
ENBAVERS' BOTTLE
BANK BATHING LIGHT
BANK BATHING MEDIUM
THUNDERBIRD
Exotic 350 Under
Exotic 350 Demi-Bold
Exotic 350 Bold
Bitstream Cooper Black
Bitstream Cooper Black Italic
Freeform 710

Freeform 710

Kaufmann
Kaufmann Bold
Cloister Black
Brush 720
Candida
Candida Italic
Candida Bold
Candida Bold Italic
Egyptian 710
Cloister Open Face
Bodoni Bold Condensed
Bodoni Bold Condensed Italic
Wedding Dress
Brush 425
Freeform 721
Freeform 721 Italic
Freeform 721 Bold

Freeform 721 Black

Bitstream Cooper Black Outline
Goudy Heavyface
Goudy Heavyface Condensed
Goudy Handwritten
Goudy Catalogue
UMBRA
INFORMAL 011
INFORMAL 011 BLACK

Office

- Caslon 540
- Caslon 540 Italic
- BALLON LIGHT
- Futura Light
- Futura Light Italic
- Futura Book
- Futura Book Italic
- Futura Medium
- Futura Medium Italic
- Futura Bold
- Futura Bold Italic
- Futura Heavy
- Futura Heavy Italic
- Futura Extra Black
- Futura Extra Black Italic

- Futura Light Condensed
- Futura Medium Condensed
- Futura Bold Condensed
- Futura Bold Condensed Italic
- Futura Extra Black Condensed
- Futura Black
- Humanist 970
- Humanist 970 Bold
- Caslon Old Face
- Caslon Old Face Italic
- Humanist 521 Light
- Humanist 521 Light Italic
- Humanist 521
- Humanist 521 Italic
- Humanist 521 Bold
- Humanist 521 Bold Italic
- Humanist 521 Extra Bold
- Humanist 521 Ultra Bold

- Aldine 401
- Aldine 401 Italic
- Aldine 401 Bold
- Aldine 401 Bold Italic
- Humanist Slabserif 712
- Humanist Slabserif 712 Italic
- Humanist Slabserif 712 Bold
- Humanist Slabserif 712 Black
- Bookman
- Bookman Italic
- Caslon Old Face Heavy
- Aldine 721
- Aldine 721 Italic
- Aldine 721 Bold
- Aldine 721 Bold Italic
- COOPERPLATE GOTHIC
- COOPERPLATE GOTHIC Bold
- COOPERPLATE GOTHIC HEAVY
- COOPERPLATE GOTHIC CONDENSED
- COOPERPLATE GOTHIC BOLD CONDENSED

- Caslon Bold
- Caslon Bold Italic
- Humanist 521 Condensed
- Humanist 521 Bold Condensed
- Humanist 521 Extra Bold Condensed
- Americana
- Americana Italic
- Americana Bold
- Americana Extra Bold
- Blippe Black
- Caslon Open Face
- Bernhard Modern
- Bitstream Amerigo
- Bitstream Amerigo Italic
- Bitstream Amerigo Bold
- Bitstream Amerigo Medium
- Bitstream Amerigo Medium Italic
- BALLON BOLD
- BALLON EXTRA BOLD

- Compacts Light
- Compacts
- Compacts Italic
- Compacts Bold
- Compacts Bold Italic
- Compacts Black
- Aldine 721 Light
- Aldine 721 Light Italic
- Bernhard Modern Italic
- Bernhard Modern Bold
- Bernhard Modern Bold Italic
- Humanist 777 Light
- Humanist 777 Light Italic
- Humanist 777
- Humanist 777 Italic
- Humanist 777 Bold
- Humanist 777 Bold Italic
- Humanist 777 Black
- Humanist 531 Bold

- Humanist 531 Black
- Humanist 531 Ultra Black
- Brace Old Style
- Brace Old Style Italic
- Aldine 721 Bold Condensed
- Bernhard Modern
- Bernhard Bold Condensed
- Brace Old Style
- Brace Old Style Italic

All 100 fonts available in the OFFICE package

Configuring printer drivers involves, among other things, specifying print quality, paper size (including an option for user defined paper size), indicating whether the output should be in colour or black and white and setting the required resolution.

The OUTLINE program now has provision for three folders where fonts are stored. However, it is not required to specify all three. Different font types can be stored, mixed in the same folder, but it's much tidier if they are kept separately. OUTLINE is also used to specify cache size for three types of caches: character, multi-purpose and bitmap. The remaining two options are font size and width tables settings.

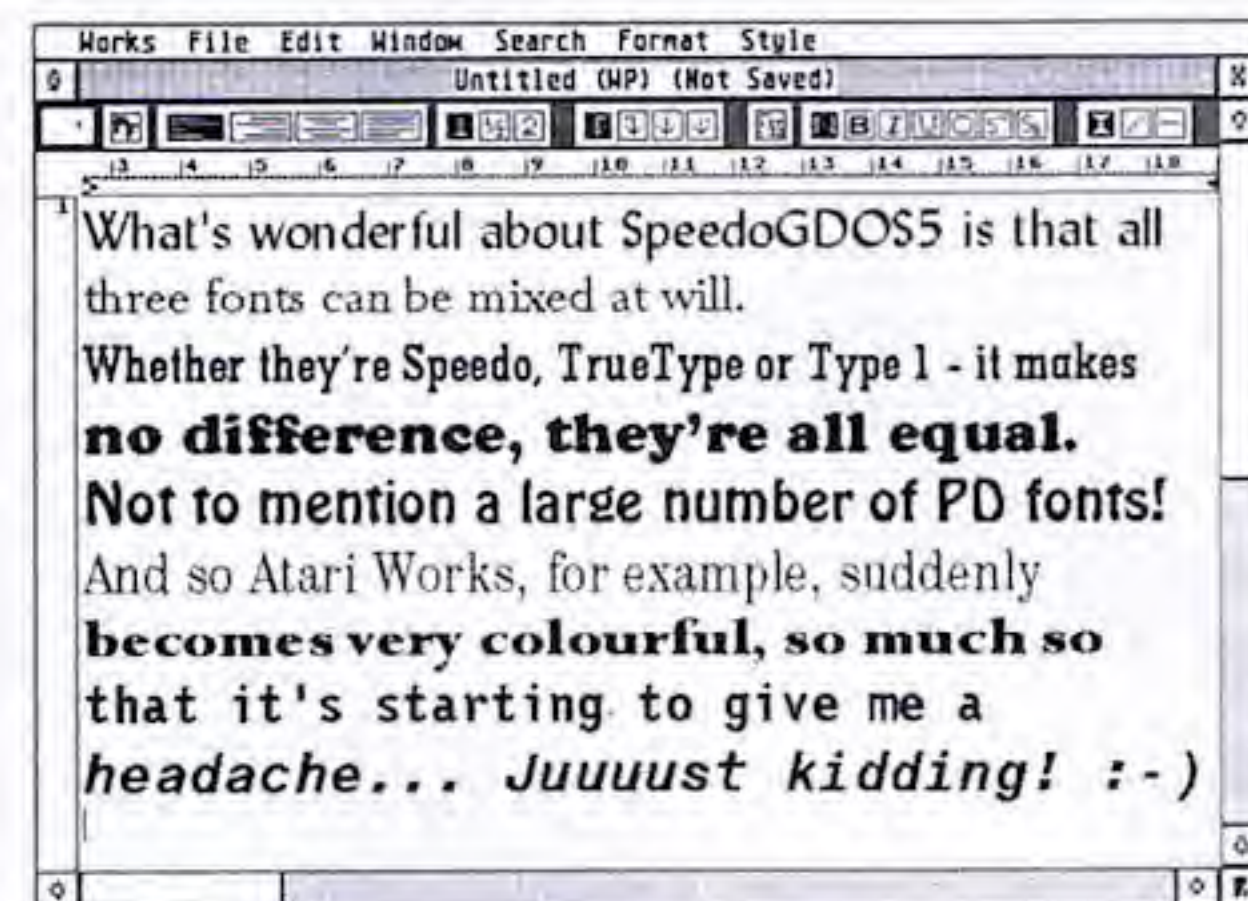
Once installed, all fonts, regardless of format, are immediately available and can be mixed simultaneously in the same document. Unless they're jotting down the names during installation, the users are not even aware whether a font is Speedo, TrueType or Type I. With the

advent of SpeedoGDOS 5.0, there are now literally tens of thousands of fonts out there ranging from the mundane to the exotic.

Even though the SpeedoGDOS 5.0 previewed here was only a beta test version, no problems were encountered and the program is indeed faster than older versions. The final benchmarks will be available when the program is finished, as it would be unfair to clock a beta version. The seamless incorporation of TrueType and Type I fonts is most welcome as it opens up a whole new range of fonts as accompanying font bundles clearly show.

HYPERMEDIA

To demonstrate the new SpeedoGDOS 5.0, two free presentation programs were produced as Hypermedia animations, one in colour and the other in monochrome. These files should be available on various BB's as



Using a mixture of all three font formats in the same document

SPD5DEMO.TOS (640x480, 16 colours) and SPD5DEBW.TOS (640x400, 2 colours).

In Germany, SpeedoGDOS 5.0 will be supplied with 22 Speedo fonts for 129DM (about £55), and an upgrade from version 4.x costs only 69DM (about £30). Additional fonts are available in two bundles of 100 fonts each.

These bundles – Speedo-Gold and Speedo-Office – retail separately for 99DM (about £40). There are also two CD-Roms with 500 fonts each. The mixed TrueType/Type I CD costs DM99 (about £40) while the TrueType “Star” CD goes for only DM69 (about £30).

Breaking a long silence, Atari have also written to all registered developers in Germany informing them of the new SpeedoGDOS version.

The developers will have to pay DM69 (about £30) for their upgrade which will include all developer information for new features and continued support from Compo.

WELCOME

The advent of SpeedoGDOS 5.0 is indeed very welcome news. Not only because of what it brings to the user but also because of what it means. Atari have neglected their computer line for far too long and it's a good sign that they are at long last engaging outside companies to continue the work for which they themselves apparently have no resources.

By continuing future developments in Europe, the developers are also closer to the bulk of Atari users. German developers have consistently produced new products, both hardware and software, so lets hope that Atari cooperates with them and with others as much as possible. The signs are that this is exactly what is happening.

So it's goodbye to that “the development is on hold” stuff – we're rolling again!

on Speed

SpeedoGDOS 5.0

Neu:

Font-Formate

Druckertreiber

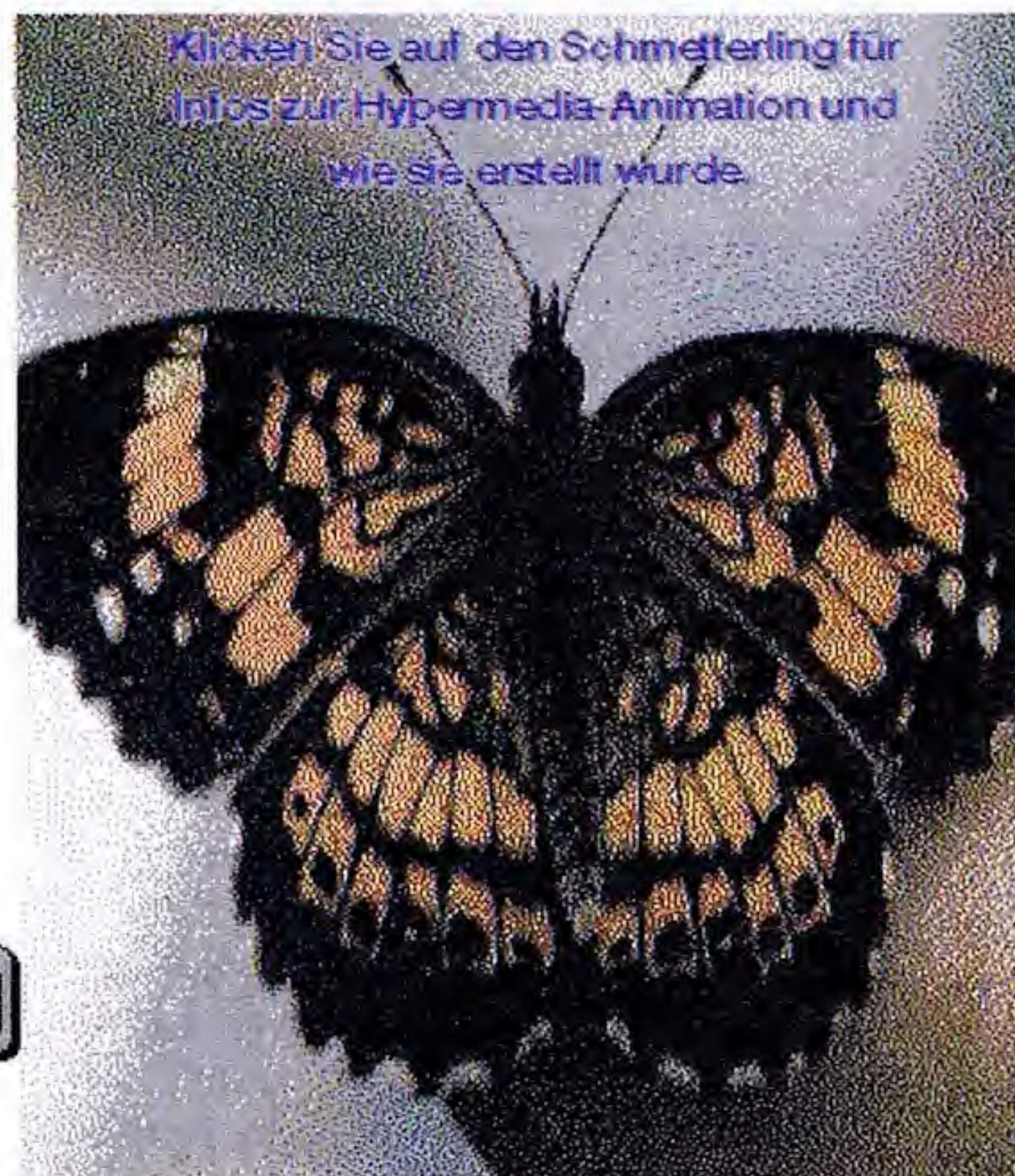
Fonts

Handbuch

Kompatibilität

Weiterentwicklung

Preise



SpeedoGDOS 5 demo available at your BBS soon



Enterprise Zone

Sample
typeface
collection



Flat 3
86 Wednesbury Road
WALSALL
West Midlands
WS1 4JH.

FAX ☎ (0922) 616358.

If one were to design a scale of motives for people buying computers, the two extremes would be easy to define.

At one end of the scale would be the hard-headed business decision, where a company decides that a personal computer would be more cost-effective at a task which previously had been performed with more traditional tools.

Good examples of this are the deployment of word processors to replace typewriters in the typing pool, and the use of spreadsheets to facilitate what-if financial calculations.

At the opposite end there would be the pure hobbyist. Whether the computer is used to play games, to dabble in programming languages, to draw pictures or to hook up to a MIDI keyboard, it's the fun that counts, and the expense does not have to be justified in cost-benefit terms.

Then there are all sorts of categories

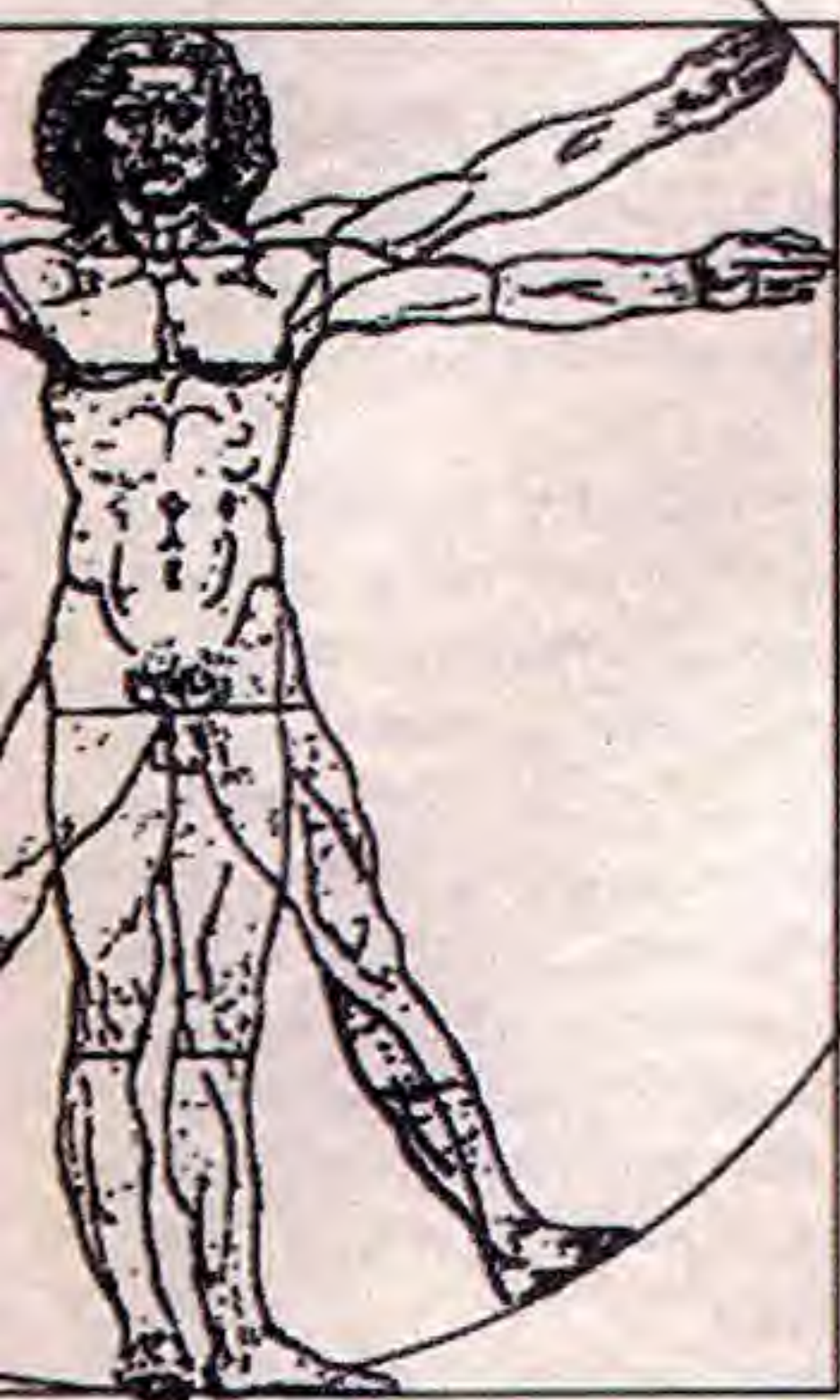
in between these two extremes. Indeed a lot of the people I have visited for this series of articles seem to fall into this region, somewhere between pure business and pure leisure.

One or the other may well have been dominant in the original decision to buy an Atari, but there is usually a secondary motive too.

VERSATILITY

More than anything else perhaps, it is the versatility of the machines which has sold hundreds of thousands of STs in this country alone, and millions all over the world.

A computer system is not, after all, a trivial item in anybody's budget. Even if it is sold under the "Power without the price" slogan, once you have added a printer and one or two of the other irresistible peripherals — such as a hard disk or a scanner — you are talking the best



XUS
ISHING

Home computer or business machine? The ST can be both.

Günter Minnerup meets one of many computer hobbyists looking to make their Atari pay its way

part of a thousand pounds. Some desirable pieces of software, memory expansions, books and, of course, computer magazines can easily lead you into a tense relationship with your bank manager, so why not make your system pay its way — at least in part?

This is what Dave Howell was thinking when he first cast a longing eye on the Atari ST. Whatever he says now, I don't believe his protestations that buying an ST was purely motivated by professional considerations.

After all, as a previous owner of such machines as a Sinclair Spectrum, he surely qualifies as a computer enthusiast.

A printer by trade, currently employed by Walsall Council, he has always had ambitions to go into graphic design and publishing.

So, when the ST came along, he kept a watchful eye on the coverage of desktop

Book review

A good readable introduction to desktop publishing on the Atari ST/STe/TT/Falcon series of computers has been long overdue. If Atari had any marketing awareness at all, they would have commissioned such a book themselves several years ago at a time when they appeared to have a conscious strategy of pushing their machines for serious consideration as a professional desktop publishing platform.

Even today, when Atari Corporation themselves seem to have given up on any such ambitions to win a slice of the serious action from the PC clones and Macs in favour of a return to their former status of purveyors of games consoles to the teenage world, it is far from too late for such an effort.

There are hundreds of thousands of Atari machines still in use, new machines can still be bought at good prices, and Atari DTP software is going from strength to strength. Packages such as Calamus SL and DA's Layout can certainly hold their own in any "industry-standard" company.

David's book is a laudable attempt to fill this void. It is well thought out in its structure and covers all the basic points, namely the hardware platforms available and the essential differences between them, their operating systems and user interfaces.

The book tells the basic peripherals needed for DTP and the range of Atari machines available and their particular strengths and weaknesses. The page layout software for Ataris is detailed along with auxiliary software such as word processors and graphics packages and the different options for printed output, typefaces, utilities and upgrades.

Two example systems with detailed costings are introduced, and there is a detailed glossary of technical terms as well as useful lists of DTP books, output bureaux, Atari computer magazines and other helpful addresses.

The entire book was, of course, produced using Atari equipment and software, and is conveniently bound in the sort of ring binder that accompany many software manuals.

More high-end topics such as colour reproduction and image retouching are not dealt with because the book is unashamedly targeted at the low end of the market, especially — as the title says — at small printers thinking of buying their first computer.

This is a market segment that was heavily targeted by the UK distributors of Calamus — first Signa Publishing, then Halco, and now JCA.

None of them had more than marginal success, and it is doubtful that this book will change that situation as it promotes exactly the same product, namely an Atari computer running Calamus, and uses exactly the same arguments.

Despite the claims that this combination is much cheaper, yet just as powerful as the Mac and PC competition, for low-end monochrome work at least, this is no longer as true as it was a few years ago.

Another problem is the one-sided focus on Calamus. "Small Printer", the monthly magazine of the British Printing Society and thus the house journal of Dave's target group, regularly carries articles on PostScript.

Prospective investors in Atari hardware will therefore be worried about being excluded from the mainstream in their own industry. It would have been better, I think, to give a broader picture, introducing alternative packages with PostScript support (DA's Layout, PageStream, Timeworks) alongside Calamus.

The chapters on software are generally too skimpy, and with all respect to those proven work-horses, First Word Plus, Arabesque and Touch-Up, they are hardly the last words in Atari word-processing, graphics and scanned image editing! Even small printers at the low end of the industry need to be impressed with the full capabilities of the system so they know that there are future expansion possibilities, and that there is no need for inferiority complexes vis-a-vis their Mac or PC-owning competitors.

Also, since anybody ordering this book will naturally take it as representative of what can be done with Atari DTP, a bit more care over design and typography would have been more convincing.

Professional printers — even small ones — have critical eyes for these things, and tend to notice poorly aligned text columns and page numbers in the table of contents, as well as the dodgy quality of the "Time" fonts as supplied with Calamus 1.09. They may not notice little factual errors such as TOS being the name of the ST's graphical user interface — it's not, GEM is — but many existing Atari owners will.

For a general introduction to computerised page layout however, the book is useful. The language is clear and non-patronising, making it an ideal starting point for those who have little or no experience of computers and wish to prepare themselves for the confrontation with slick salesmen at their local Dixons.

As a jargon-buster it will be of interest to novice ST owners taking a first look at desktop publishing.

Author: David Howell

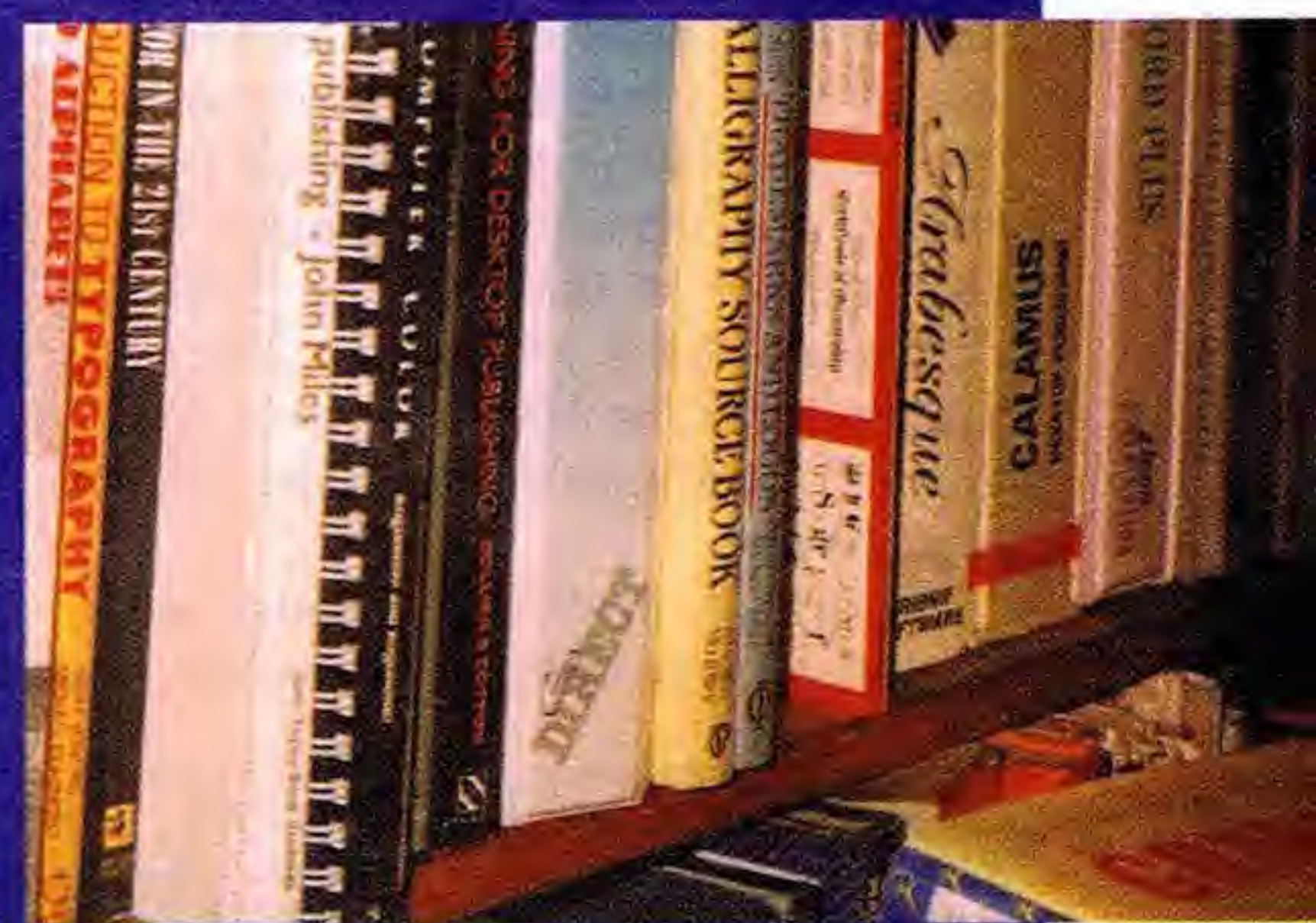
Title: Desktop Publishing for the Small Printer

Publisher: Nexus Publishing, Flat 3, 86 Wednesbury Road, Walsall, West Midlands WS1 4JH.

Telephone: 0922-616358.

ISBN: 1-899092-00-5.

Price: £14.95 (add £1.50 p&p)



publishing software in the computer press. Then as soon as the release of Calamus was announced to rave reviews, he pounced and bought both the software and a Mega ST to run it on.

The first venture into the world of commerce was the design and production of letterheads and business cards for local traders.

The Atari SLM804 laser could be pressed into service not only for camera-ready copy, but for final printing too, provided the printrun was not too large – with eight business cards fitting onto a Calamus page, fifty such sheets would keep a small taxi firm or builder going for quite a while.

But useful as the extra income through such activities was, it could not make a serious dent in the budgetary deficit caused by the initial investment in the hardware and software.

The rapid spread of Prontaprint-style cheap copyshops in recent years also contributed towards gradually eroding the customer base, so Dave began to think about more ambitious projects.

The most ambitious plan of them all was to start a software import company. "So many good programs were written in Germany and the US but never found a distributor in the UK, that I thought this would be a good way of making money as well as providing a service to the ST community in Britain", he remembers.

Doing such deals required the setting up of a proper company however, and

When the British Print Society organised a design competition for a jubilee logo, Dave could not resist the challenge. His Migraph handscanner, Touch-Up, Arabesque Professional and Calamus combined to produce this effort which the judges placed second



some start-up funding needed to be obtained. A prospective business partner offered half of what was required, and Dave decided to approach a bank for the other – his half.

Anybody who has ever been in this position knows that it is essential to have a proper business plan to present to the bank manager if you are to convince him to chance a small business start-up loan. So, Dave employed his DTP skills to knock up what the bank manager was to call "the smartest looking business plan"

he'd seen for a while. The eye-catching trick was to add striking graphics to the monochrome Calamus text output by feeding the latter into a colour photocopier.

Dave got the loan he wanted, but unfortunately the venture never got off the ground as his prospective partner chickened out at the last minute.

Undeterred by this, he continued to sniff out ways of making his hobby pay. Computer journalism – among other things Dave writes the regular "Euronews" column in leading American Atari magazine "ST Informer" – was one answer, but not one where any DTP skills were required.

LAUNCH

So he went one step further and launched his own publishing company, Nexus, with his own book, "Desktop Publishing for the Small Printer" (see review).

Nexus also offers graphics and printing-related services to small businesses, such as the design of business plans, corporate identities, promotional literature and reports.

With all this talk of making money and venturing into business, it is easy to forget that we are talking about one young man of 28 who is still in full-time employment and operates from the confines of a small bedroom crammed with computer gear and books.

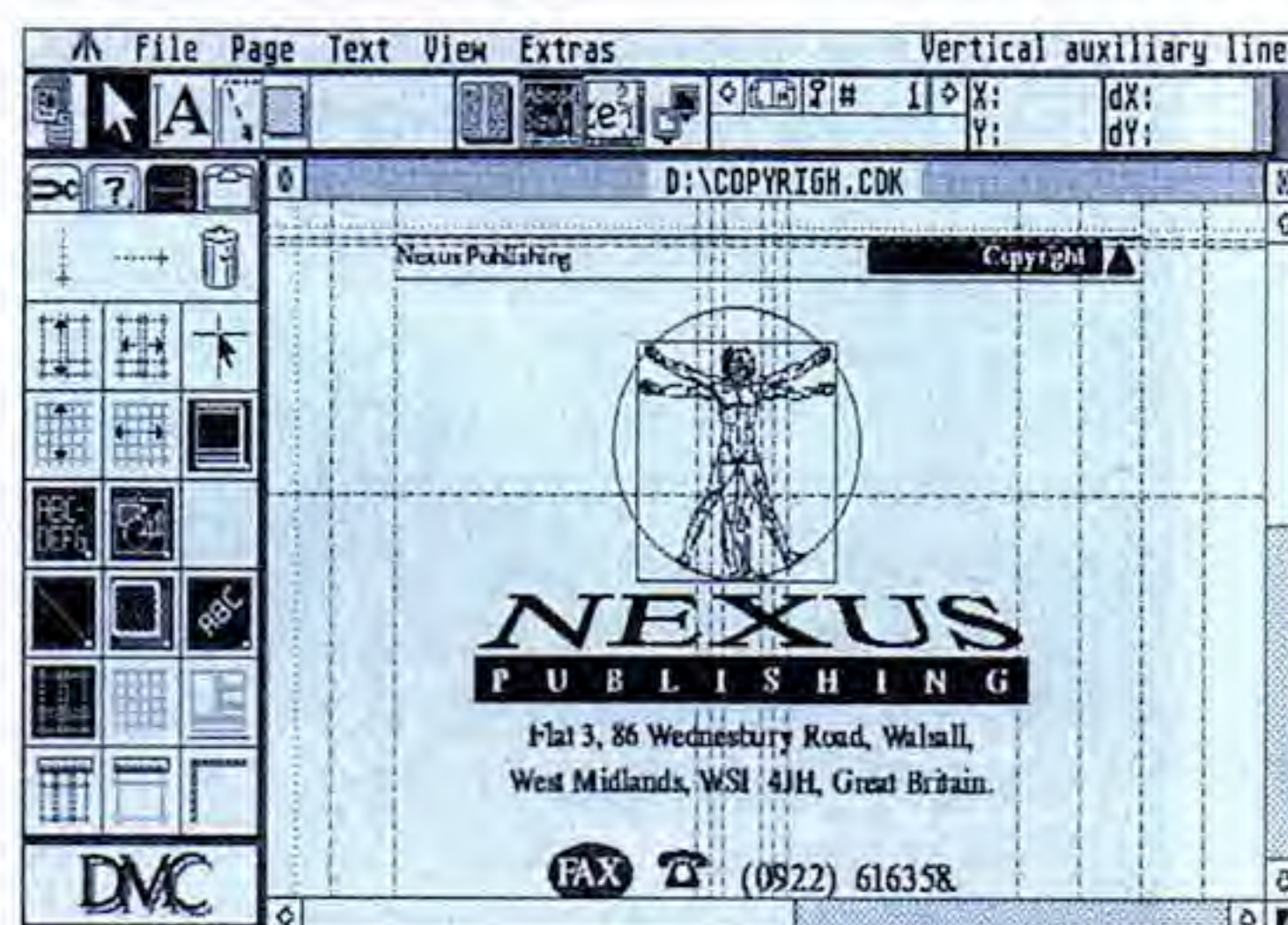
I have no idea how successful all this is going to be, and for all I know the profits might amount to little more than the operating costs of the laser printer (no mean feat given the price of SLM804 drums and toner, I should add...).

But does it really matter? Nobody who has met Dave Howell and listened to him talking about what can be done with Atari hardware and software can fail to be impressed with his infectious enthusiasm and energy.

Perhaps, with a bit of luck, the Atari platform will become the launching pad of a successful business career for him. If not, it will still have paid some of its way: by bringing in some useful cash, helping to sharpen his marketing and design skills, and not least by providing hours of fun.



Calamus 1.09 is at the heart of Dave Howell's system. Most of his time is now taken up by laying out the soon-to-be-launched Font Catalogue



A well designed logo is a must for any business these days, large or small, but especially so for anyone in the graphic design and publishing trade

Font catalogue

Dave's latest project is something which could really fill a gap in the Atari scene. Everybody who is into desktop publishing knows how difficult and expensive it can be to acquire a decent collection of typefaces. Commercial Calamus fonts are not exactly cheap, and there is still a limited choice compared to the PC and Mac world.

Most PD libraries do offer disks crammed full with public domain and shareware fonts, but these are often of dubious quality and are not particularly well catalogued. In most cases the filenames are less than descriptive, and you usually have to order complete disks in the hope that one of the fonts included is what you are looking for.

Bulletin boards and online conference systems such as CIX and CompuServe are only a viable alternative for those with very fast modems, and the same difficulty of identifying the right typefaces by their filenames applies here too.

Wouldn't it be nice if there was a proper catalogue of typeface samples which you could peruse at your leisure, picking the ones that look right for the job at hand and then being able to send for a disk of

such hand-picked fonts?

This is precisely what Nexus Publishing's Type Catalogue will offer, and Dave has already assembled a considerable collection of public domain PostScript fonts. These have been converted to Calamus using Font Designer, and the first catalogue is now in the process of being typeset.

The next step will be to look at TrueType fonts which have become very popular in the Windows environment. Dave is currently looking for a way of converting these to PostScript or some other format which will allow him to generate Calamus versions.

With the advent of SpeedoGDOS Version 5, which will no longer require Bitstream fonts, instead being able to handle both PostScript and TrueType directly, he may even offer disks in those formats alongside the Calamus fonts.

Since most Atari DTP packages and wordprocessors are now capable of using one or the other of these font formats, Dave's catalogue service should not find itself short of customers.

System Solutions

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Monochrome Monitors

The award winning SM14 is a perfect replacement for the Atari SM124/5 monochrome monitors: it exceeds Atari's original specifications. The 14" high resolution, paperwhite FST (Flatter, Squarer Tube), gives a perfectly centred, crisp, sharp image without blurring at the edges. The SM14 comes without, and the SM14s with, a speaker. The SM14f is for the Falcon. A Tilt and Swivel stand comes as standard.

The special version for STfm/Mega ST installed with Overscan, the screen enhancer, gives a 40% bigger display.

All monitors come as a plug-in-and-go unit, complete with Atari plug, and no adaptors are necessary.

"Essential Buy, 90%"

ST Review, May 93

SM14/f without audio **£129.95**
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 OverScan ST with SM14 **£39.95**



ATARIST ESSENTIAL BUY

MiniS - Hard Drive System

The MiniS Hard Drive System comes with drive capacities ranging from 40Mb up to 1800Mb. This full SCSI system is hardware compatible with all Atari computers, Amiga, Mac, PC etc. They are unrivalled in size, noise, speed, and style and come with a thru port for expansion. It is the only Hard drive awarded an **Essential Buy of 92% - Atari ST Review Christmas '93**, and a **Gold Award of 93% - ST Format Feb. '94**

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ATARIST ESSENTIAL BUY

GOLD AWARD
 ST Format

Falcon 030 Systems - 32Mhz

The Falcon is fast becoming the preferred choice for 8 track digital recording, with powerful programs such as Cubase Audio using it to its full potential. The DSP chip opens up a whole new world of Sound and Graphics. System Solutions now supply 32Mhz Falcon 030 computers from stock.

PowerUp2 is a brand new 32Mhz accelerator for the Falcon, available now. **PowerUp2** doubles the CPU

clock speed and does not take up the internal expansion slot.

We supply systems for Music, Desk Top Publishing, Image Manipulation, Animation, Desk Top Video, fax & modem use etc. Please phone for your personal quotation of a tailor-made Falcon 030 System.

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MagiC - Multitasking Operating System

"It's like running an accelerator and getting the multitasking thrown in for free." ST USER, Feb. 1994

MagiC is a full TOS replacement, a very fast disk filing system; has accelerated serial, midi and printing routines, and is, of course, a true pre-emptive multitasking system.

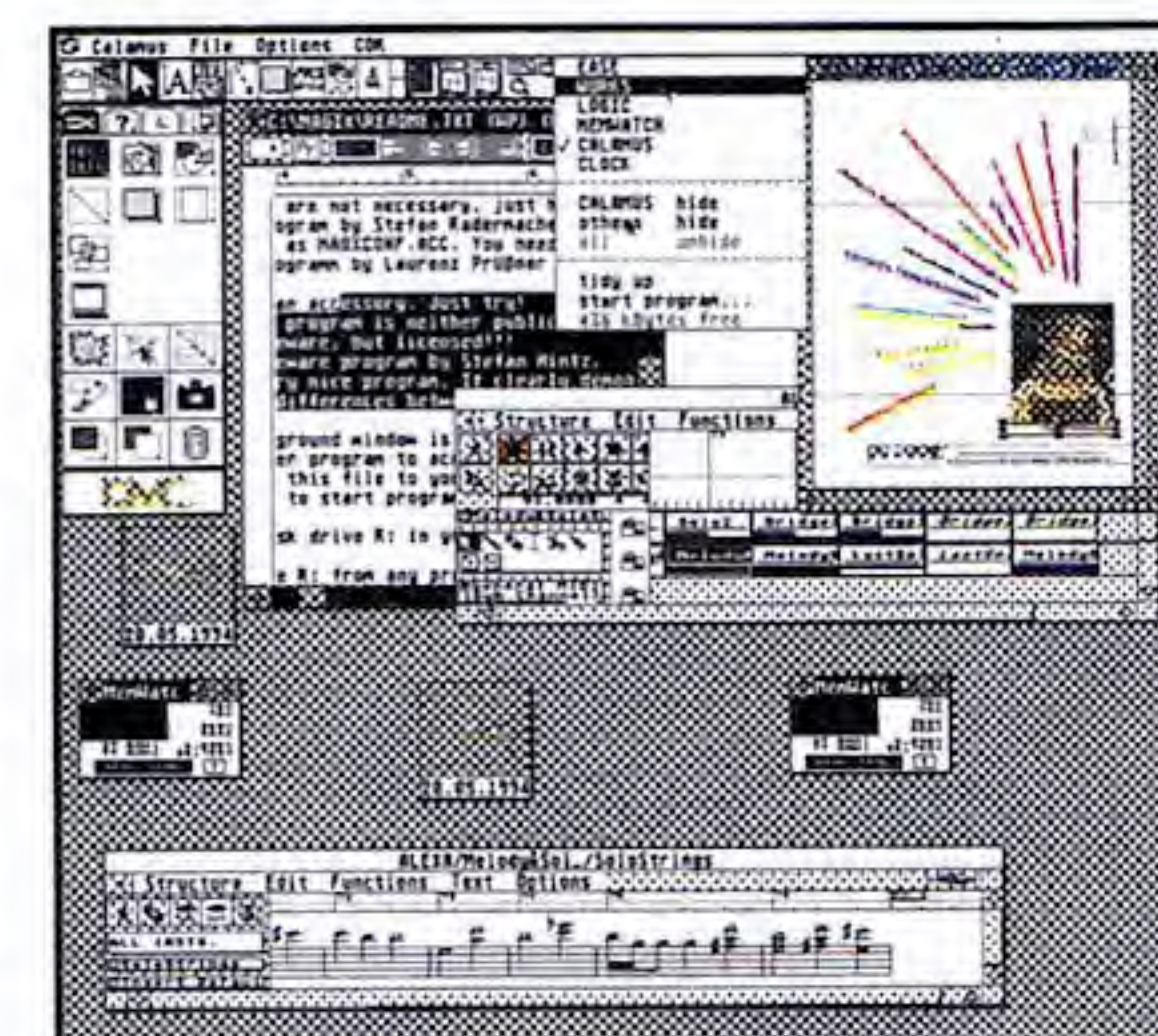
MagiC Desk, a replacement Desktop and a powerful command shell have been included. **MagiC** runs on all ST, Mega and TT computers with 512Kb, but 2Mb is recommended for a

useful working system. The Falcon version is expected later this year.

"If you want a multi-tasking system that works simply and reliably, then **MagiC** is for you." ST Review, June 1994.

MagiC (Intro price) **£59.95**
 MagiC and NVDI v2.5 **£69.95**
 MagiC and Kobold **£99.95**

NB: Excellent with Calamus SL. Compatible with Notator Logic, but not with Notator SL and not yet compatible with Cubase.



NVDI 3

NVDI version 3 features:
 Enhanced Speedo Support, with the ability to use True Type fonts, Up to 9 times faster than Speedo GDOS v4. Works with all TOS versions on all Atari computers.

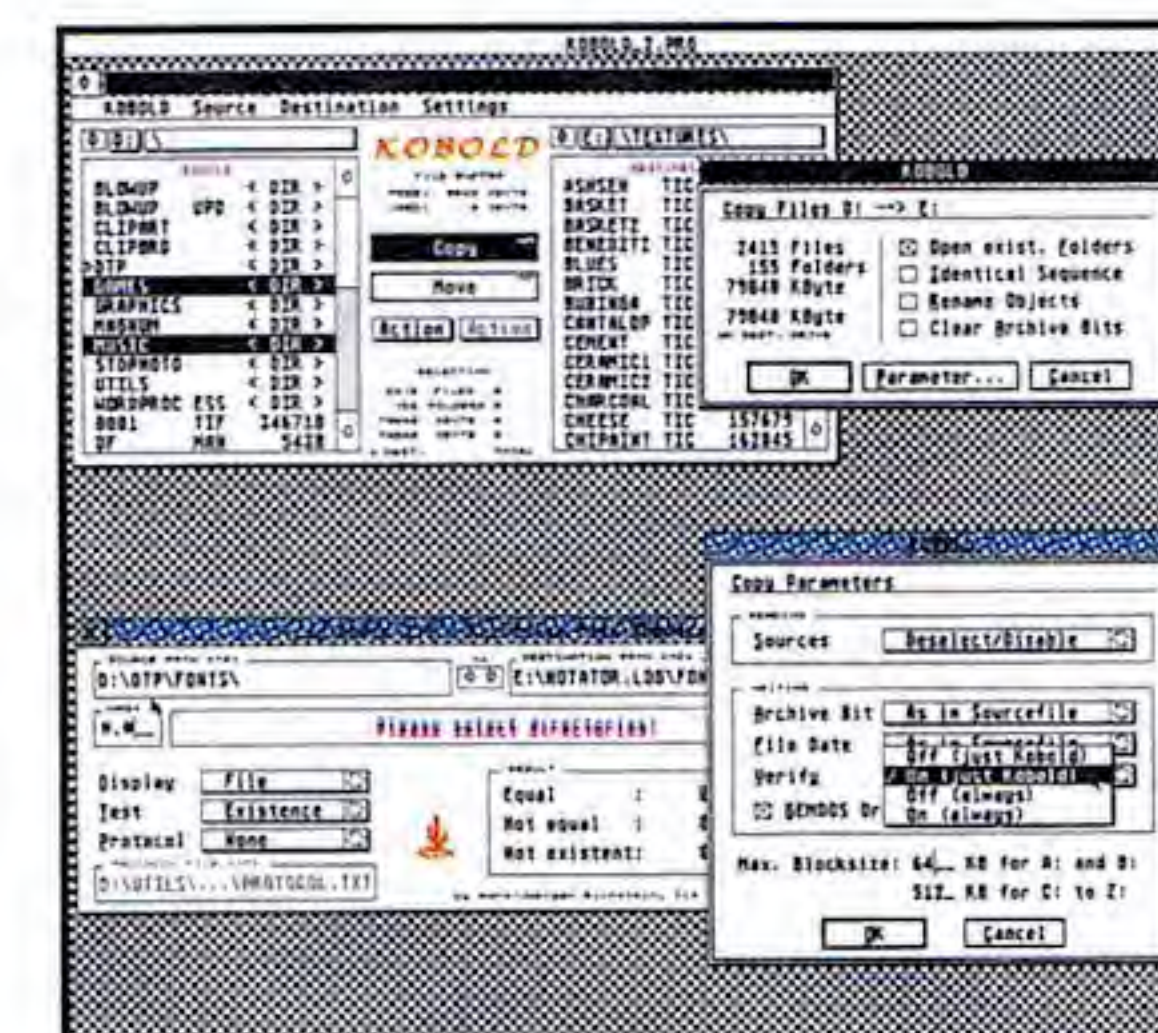
Cubase and Notator compatible.
 'Compatibility is remarkable and we have yet to find a program that is not compatible with NVDI'. ST Review

NVDI version 2.5 **£29.95**
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Kobold

Kobold is a high speed file manager. It's unique handling of the Atari file system gives unrivalled speed when copying, moving and deleting files. Copies 1000 files, (10Mb) in 45sec, (GEMDOS 5:35min) Use Kobold for Backups, Formatting Floppies, Move/Copying, Updates, Timed Jobs, etc.. It also includes a script learn function to automate repetitive functions.

Can be run as an .ACC or .PRG
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ATARI WORKSHOP

Grocery Lister

Programmed by: Randy Hoekstra

Available from: Goodman International
Disk No: GD 2318

Now here's an original concept. Some American bloke has decided that our shopping trips are far too disorganised and haphazard, and has produced the ultimate computer shopping list creator.

A list of all manner of food and essentials is presented, and the user clicks on the items that are required to set the quantity. The computer automatically calculates and updates the total price whenever the list is changed, and finished lists can be printed out ready for the trip to the local Sainsburys.

But it doesn't stop there. Items can be arranged on the lists in alphabetical order, or, if you prefer, by the aisle number in the local supermarket.

Individual items can have their price or aisle number changed by the user whenever necessary to keep the program completely up-to-date.

On realising that this was the case, my mind was filled with images of people wandering around their local store with a pen and paper, frantically jotting down the prices and locations of all manner of goods so that they could go home and update Grocery Lister.

You can't actually save any changes you make with this demo version, however – you'll have to pay \$15 for the full registered version if you want to do that.

The program even takes into account any money-off coupons you may have in your possession. No stone seems to have been left unturned.

This is without doubt the ultimate in shopping list compiling programs. The fact that I'm not sure it has any competition is irrelevant – if it did have, it would knock it for six because it is so detailed.

The only question I would have is why? What's wrong with scribbling down odd grocery items as they spring into your head? What's wrong with occasionally indulging in that most sinful of activities, shopping on impulse?

The way I see it, life's rich tapestry loses a few vital threads when that spontaneity is removed.

This is an accomplished program which may well appeal to some, but it doesn't really tickle my fancy.

Grocery Lister			
Number	Item	Price	Quantity
1	Cinnamon rolls	1.49	1
2	Chicken Jnr (Kraft)	1.49	1
3	Eat Lizer	1.49	1
4	Braceout (Kraft)	1.49	1
5	3rd seed-santlover	1.49	1
6	Sananas	1.49	1
7	Avacados	1.49	1
8	Asparagus (can)	1.49	1
9	Apple Juice	1.49	1
10	Turkey (whole 10 lb)	1.49	1
11	Peas	1.49	1
12	Beans (can)	1.49	1
13	Tomato Sauce	1.49	1
14	Spaghetti sauce	1.49	1
15	Soda (1 liter)	1.49	1
16	Pumpkin (can)	1.49	1
17	Powdered Sugar	1.49	1
18	Plastic Wrap	1.49	1
19	Peas (can)	1.49	1

Guaranteed to revolutionise your shopping trips, it's Grocery Lister

PUBLIC SECTOR

Dave Cusick braves crashing Mac hard drives (don't ask) to bring you some of this month's most outstanding PD

Public domain and its availability is the last defence in a computer's life cycle before oblivion. When the public stop using the machine for their programming exercises and efforts, it means that not only have the commercial big boys and girls of the industry turned the back on the flagging machine, but so has the existing user base. How fortunate then that the ST PD scene is still buzzing with disks falling on to the desk at regular intervals. Let us hope it stays like that.

Starball and Painter

Programmed by: Various

Available from: Goodman International
Disk No: GD 2315

Two impressive games come together on this interesting disk. First up is Starball, a competent pinball simulation which features well-crafted graphics and plays better than most. The pinball table is about three full screens in height and scrolls to follow the movement of the ball. Bonus screens are also included. The two shift keys operate the flippers with which you try to propel the ball towards high scoring areas of the table.

The author has thoughtfully decided to spare ST owners the aural assault of a soundchip tune, and the sound effects are adequate if unspectacular. When running on the Falcon, Starball offers gamers the chance to listen to soundtracker modules as they play.

Painter is not as you might think, a paint package, but is another in the series of simple yet addictive games produced by Sinister Developments – responsible in the past for slick versions of arcade oldies. I don't know whether or not Painter originated as an arcade game, but although the in-game graphics are quite sparse, it is certainly playable and matches the high presentation standards set by Sinister in their other releases.

The object of the game is to run along some straight lines on the screen painting them a different colour, until all the lines are painted. At this point you move on to the next level. To complicate matters, you are chased by an evil nasty. If he gets too close you can dig holes in the lines which prevent him from passing, but these holes only last a few seconds so you cannot let your guard down for one moment.

Both games are entertaining, at least for a couple of hours, and cash-starved games freaks would do well to get hold of this disk.

Starball in action. See if you can find the hidden bonus games such as Breakout



Teradesk 1.39

Programmed by: Wout Klaren

Available from: Goodman International
Disk no: GD 2120

There is no doubt that the ST's desktop is sadly lacking when compared to those on other popular computers, such as PC Windows or the Amiga Workbench. There are several excellent commercial offerings, but if your finances won't stretch that far then you'd do well to get hold of one in the Public Domain. My favourite for some time now has been Teradesk, an extremely user friendly, and in my experience, stable replacement desktop.

Installation is simple – copy a couple of files onto your hard drive and you're in business. If you don't have a hard drive but you do have sufficient memory, the next best thing is to copy the files into a RAMdisk. Teradesk really needs to be in a non-removable media (ie. not on a floppy because you can remove this which will leave the ST looking for the files it needs and unable to find them).

Having said this, Teradesk is unlike KAOSdesk in that it is essentially just a couple of files

and not a whole host of tiny ones which sprawl across several directories. This makes Teradesk very tidy when in place, and installing it to run automatically is easily achieved from the "Install Application" Options menu entry on later versions of TOS.

All the features you would expect of a replacement desktop are present, such as being able to drag files and folders onto the desktop and having keyboard shortcuts for most menu options. Among the most welcome features is the new document displayer. Double clicking on a document from the desktop now opens up a scrollable GEM window – far more friendly than the horrible standard desktop version.

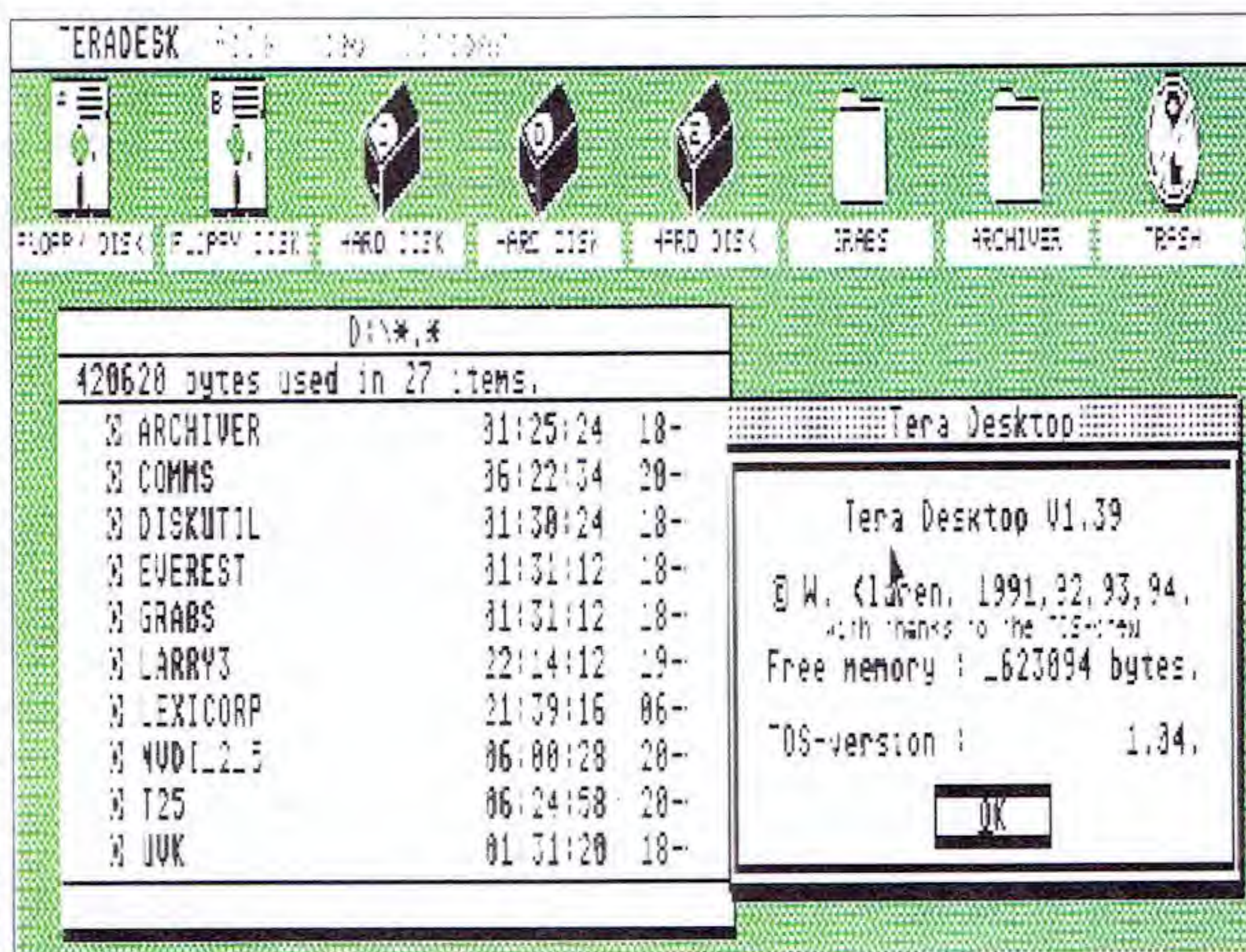
A picture viewer program is also included so now when you double-

click on a Degas or .IMG file on the desktop it will be automatically displayed.

Also included on the disk is SilkMouse, a mouse accelerator which can be controlled via a Desk Accessory, making the desktop even more usable.

Finally, a program called Profile can tell you all about your ST including which TOS version you have installed, as well as providing all manner of technical details which will be of use to programmers.

Say goodbye to the desktop blues because Teradesk is streets ahead in terms of user friendliness



Attention all PD libraries

If you wish to feature in *Atari ST User*, just send any of your titles which you feel worthy of review to: Public Sector, Atari ST User, Europress Publications, Europa House, Adlington Park, Macclesfield SK10 4NP.

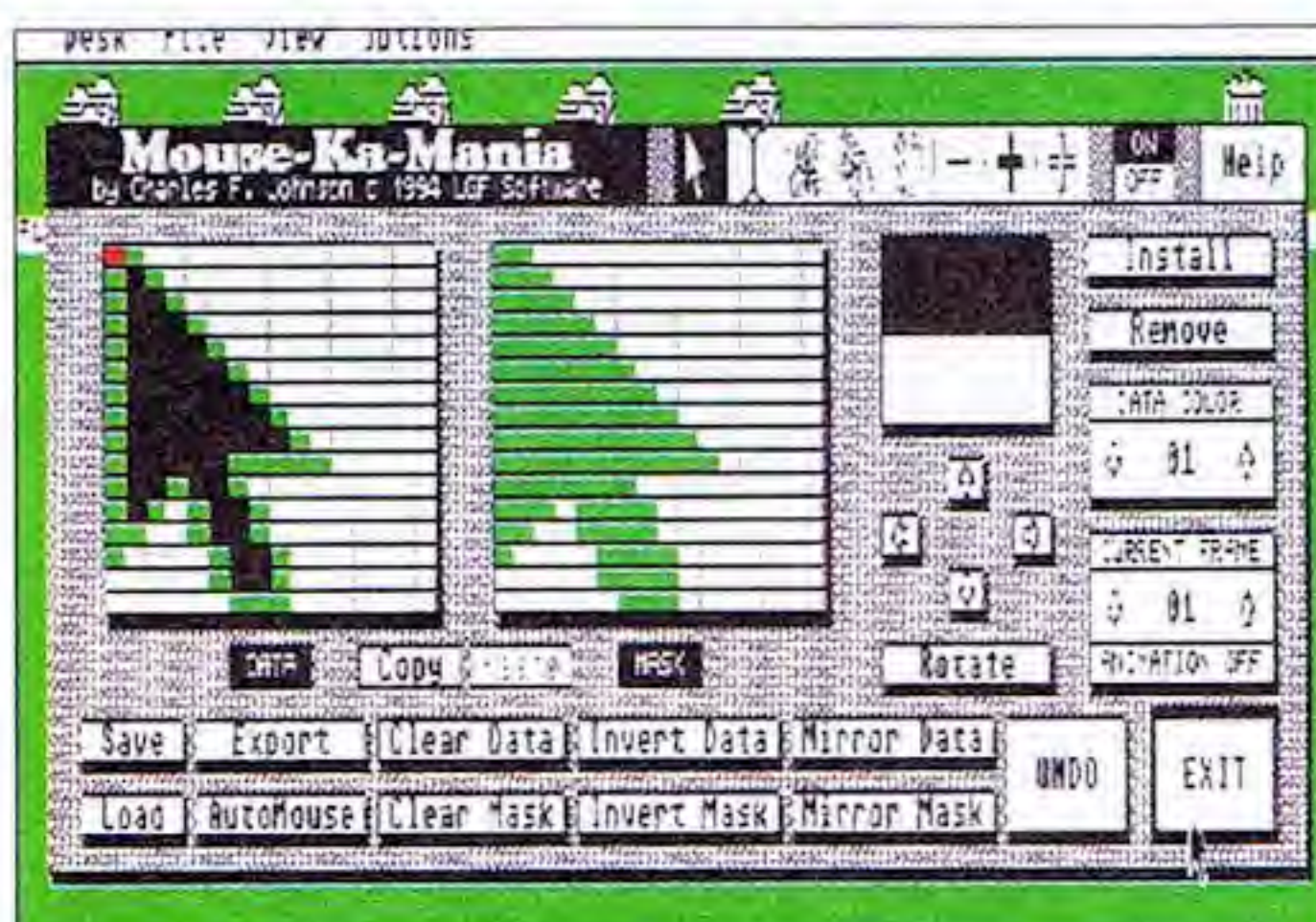
Please include a list of the contents of each disk detailing the program name/s and what they are. This ensures quick assessment and inclusion in the magazine. If you are a shareware author, send in your latest creation along with a list of libraries who will be distributing your program/s thereby achieving maximum publicity.

Mouse-ka-Mania 2/2 Column Print

Programmed by: Charles F Johnson / Jonathan Corey

Available from: Goodman International
Disk no: GD 2188

Back in the early days of the ST, a program called Mouse-ka-Mania appeared which was completely useless and yet extremely popular. It allowed users to replace the mouse



Mouse-Ka-Mania is completely pointless but is sure to give hours of fun

pointer with an animated version of their own design. Now MKM has been brought into the nineties with a new updated version.

MKM2 is easy installed and is operated through a Desk Accessory. You can either create your own animations, or if you're less artistically inclined, you can use the supplied examples. Never again will you be forced to look at that annoying "Busy Bee" picture when the drive is accessing.

2 Column Print is a utility which allows you to print out ASCII files in a magazine-style two columns, which not only looks impressive but can allow you to fit more words on a page. Plenty of options enable you to tailor the printout to your own personal specifications.

There is a slight problem in that users of TOS 2.0 or higher will find every other page is blank. This is caused by an unavoidable clash between 2ColPrint and the operating system.

However, it's not an insurmountable hurdle and once you've been warned you can learn to live with it. If you still have an earlier version of TOS you won't experience any problems anyway.

Selectrix, Egale, etc

Programmed by: Various

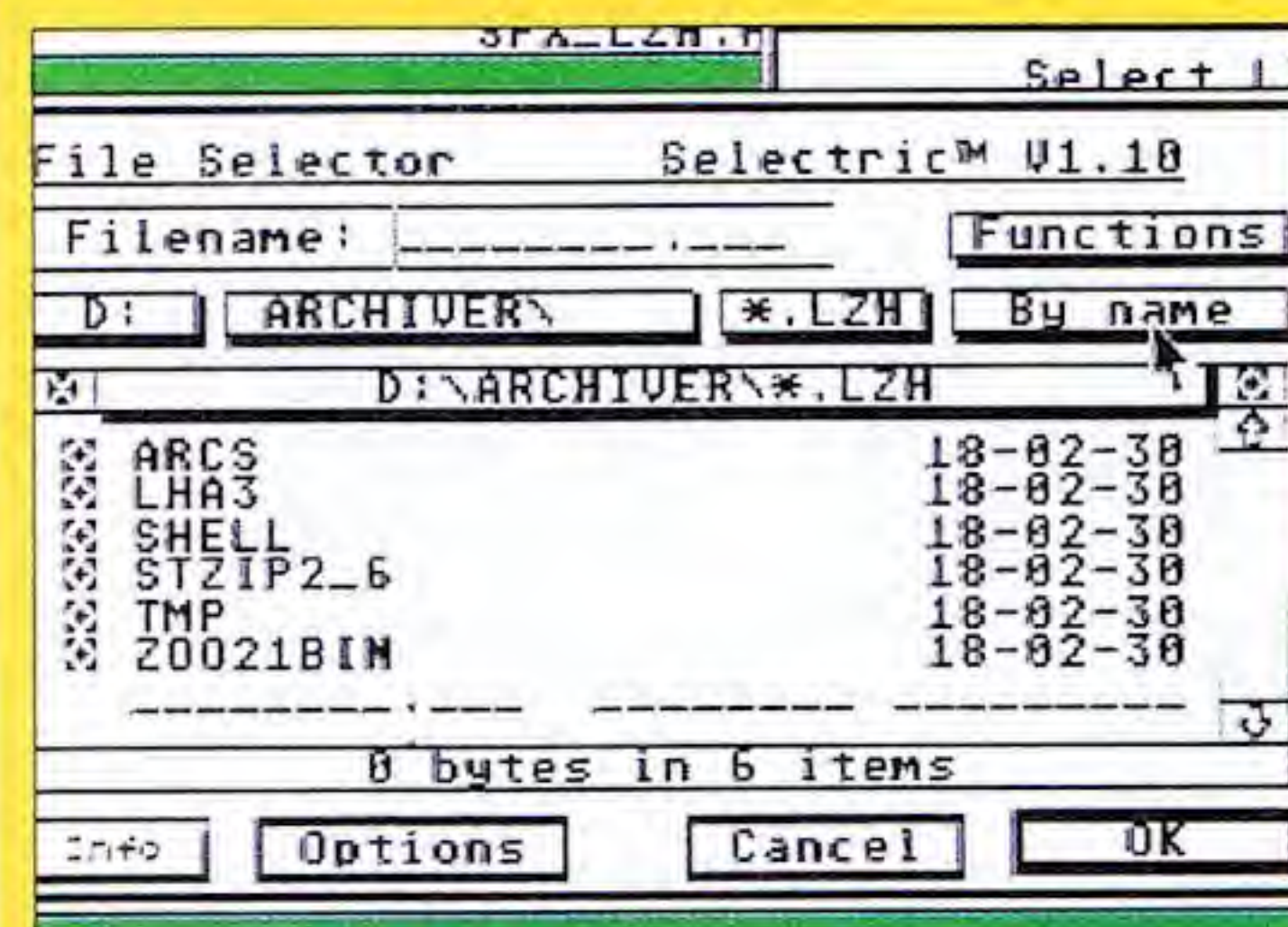
Available from: Goodman International
Disk no: GD 2312

Close runner-up to replacement desktop in the essential upgrades stakes is the replacement file selector. The GEM effort is rather puny and powerless, whereas Selectrix continues the trend for cramming all manner of useful features into a file selector, so that any time a program asks you to load or save a file you can also perform various disk operations.

Up against some fairly tough opposition, Selectrix still manages to impress.

Egale is a file comparison program. For programmers with considerable technical knowledge, Egale will prove extremely useful.

Its ability to analyse large files, picking out minute differences between them, is a task which would take an extremely long time were it to be attempted manually.



Brimming over with useful functions, Selectrix is everything the standard ST file selector should have been



Display stunning GIF pictures on any ST thanks to some clever programming

Speed of Light 3.1

Programmed by: Stuart Denman

Available from: Goodman International
Disk No: GD 2309

Speed of Light is a pretty fast picture display and image processor program, and with this latest update the range of file formats supported and processing features has increased.

This is the swiftest GIF picture displayer I have seen on the ST, and the display quality is extremely good. A selection of GIF pictures are supplied on the disk and demonstrate how effective SOL is in this department.

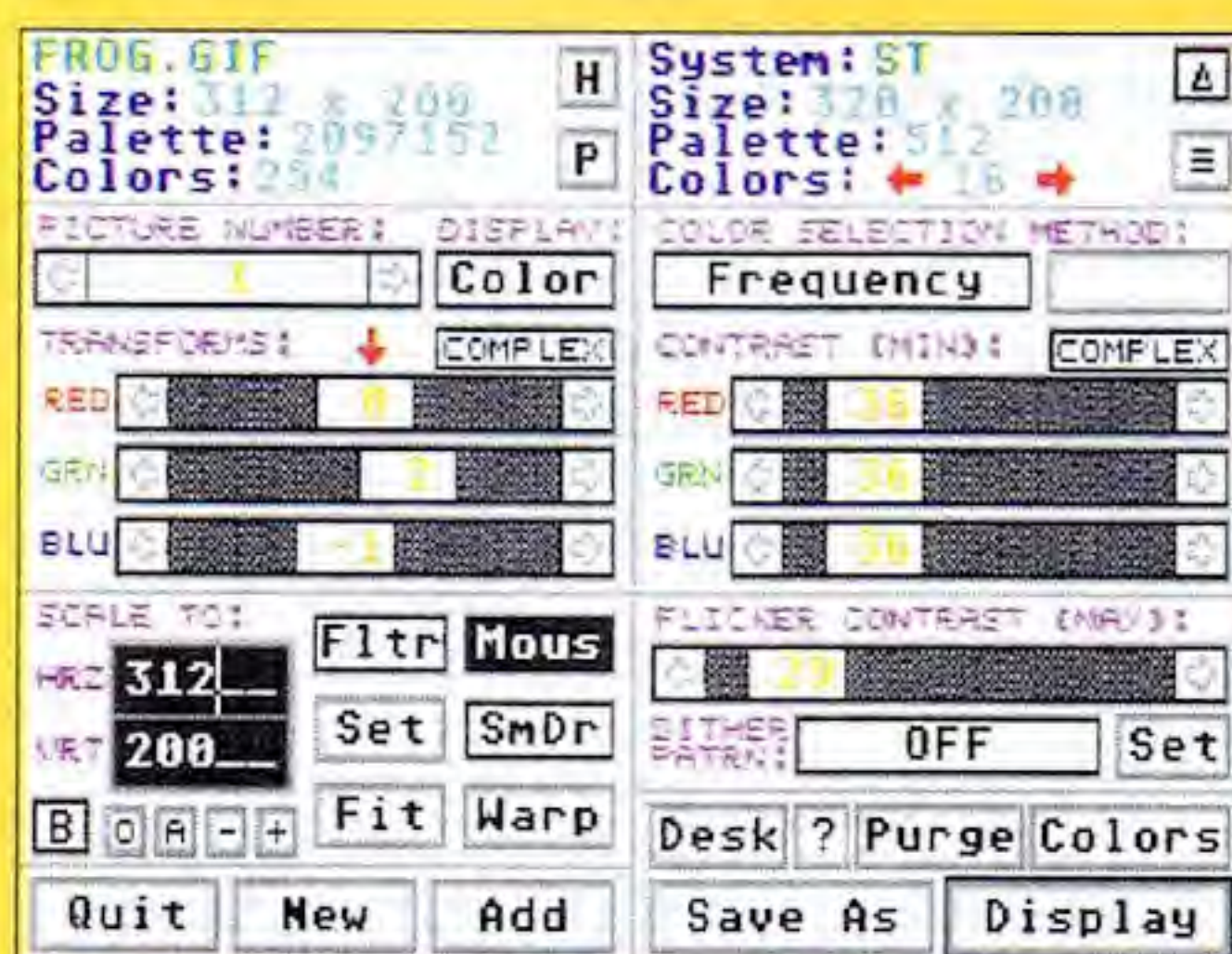
SOL also loads JPEGs, a wonderful format which manages to compress stunning pictures into absolutely tiny files.

However, SOL's greatest asset is the impressive set of image processing tools. Picture contrast, size and so on can be adjusted, and a selection of special effects are also on offer, although you have to register to use these because they are disabled on the PD demo version.

The program lives up to its name, performing most of these operations at high speed. This is especially true of the resizing feature, which takes a couple of seconds at most.

There are just enough features enabled to whet your appetite sufficiently and make you want to register.

This is a top quality piece of software and I'd strongly recommend you send the £25 fee to the author. In return he'll send you a keycode which can be typed into the program in order to gain access to the disabled features.



Hidden behind the colourful interface are a host of powerful features

Everest and Grammar

Programmed by: Oliver Schmidt /
Dan Panke

Available from: Goodman International
Disk No: GD 2317

Text editors are handy for all manner of things, from writing README.DOCs to programming. This latest English version of Everest is fully compatible with all Atari 680x0 computers and makes full use of the GEM interface, ensuring that even newcomers will find the program intuitive. It is also ideally suited to multitasking because it only uses the memory it actually needs.

The range of options is very wide, allowing you to set up the program exactly as you like it. You can then save a preferences file so that the next time you use Everest the settings are loaded automatically. This preferences file is the only file other than the program itself that is actually necessary, although if you want, screen layouts and so on can also be saved. There are no resource files to clutter up your disk.

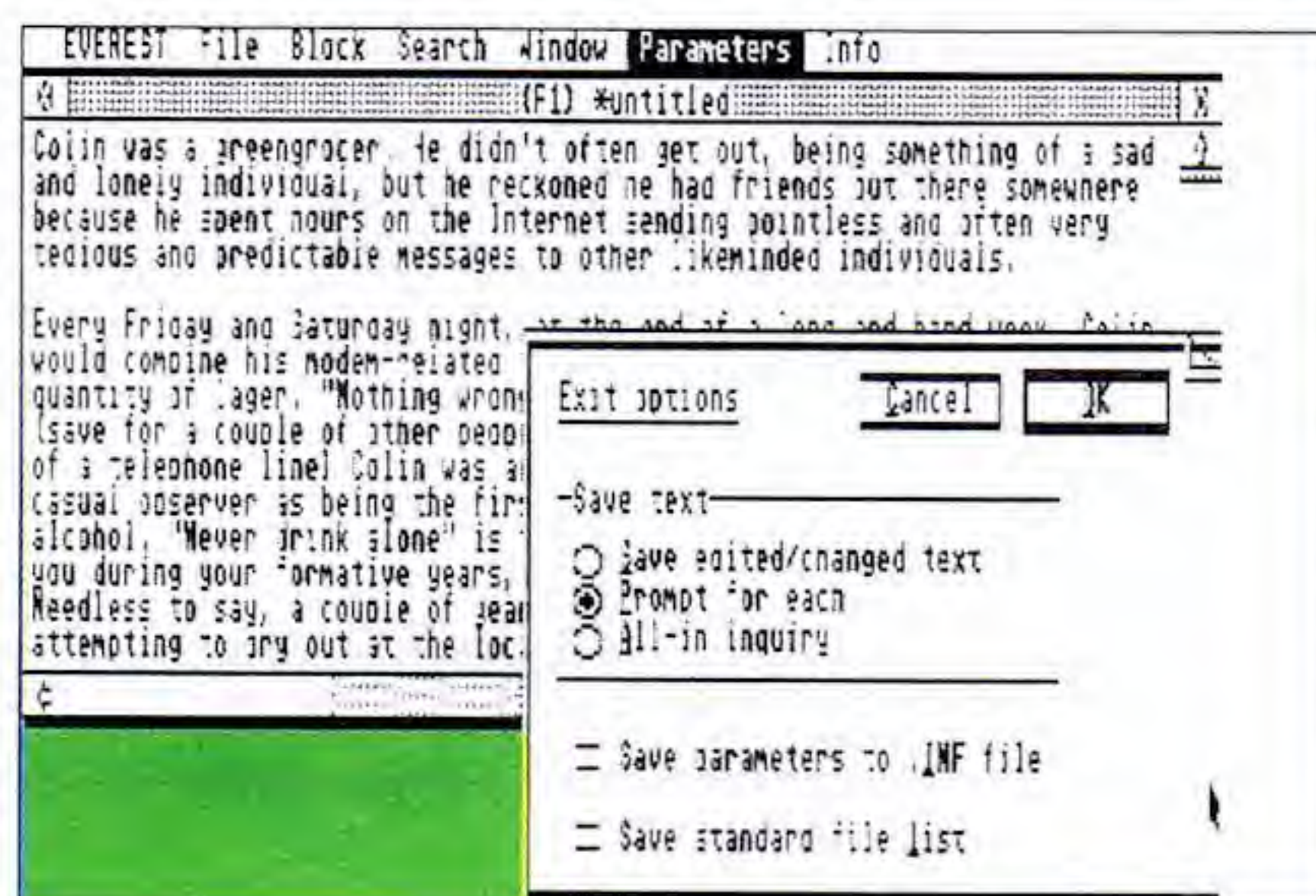
The second program, Grammar, did not impress me anywhere near as much. It is designed to alert you to possible grammatical errors in documents, but the problem with programs like this is that they must be incredibly sophisticated to do their job properly.

As a test I wrote a small document in Everest and loaded it into Grammar. There was one obvious deliberate mistake in the document, and Grammar missed it completely. It also pointed out three or four instances where there was a "Possible Grammatical Error" where, in fact, there was no error at all.

The program even picked out the word "Incredible" and suggested a couple of words such as "credulous" and "credible" which it thought I might have intended to use.

Anyway, aside from the fairly awful Grammar program, Everest alone makes it worth getting hold of this disk.

Text crunching
made easy with
Everest



Mariant, MStones and Nostram

Programmed by: Various

Available from: Goodman International
Disk No: GD 2327

Here's a novel assortment of games. First up is Mariant, an addictive and extremely challenging version of two-card-patience. Two of us here in the office spent hours trying to finish, without success. For those who cannot wrap their heads around some of the more perplexing situations, there is a built-in Help option which points out a card or pile of cards you could move. This is the sort of game that can become obsessive if you're not careful.

MStones is a three-in-one game, featuring Tetris, Bitris and Columns. It runs in whatever resolution you happen to be in, but playing in medium resolution is not recommended because the blocks will be extremely distorted due to the strange screen dimensions.

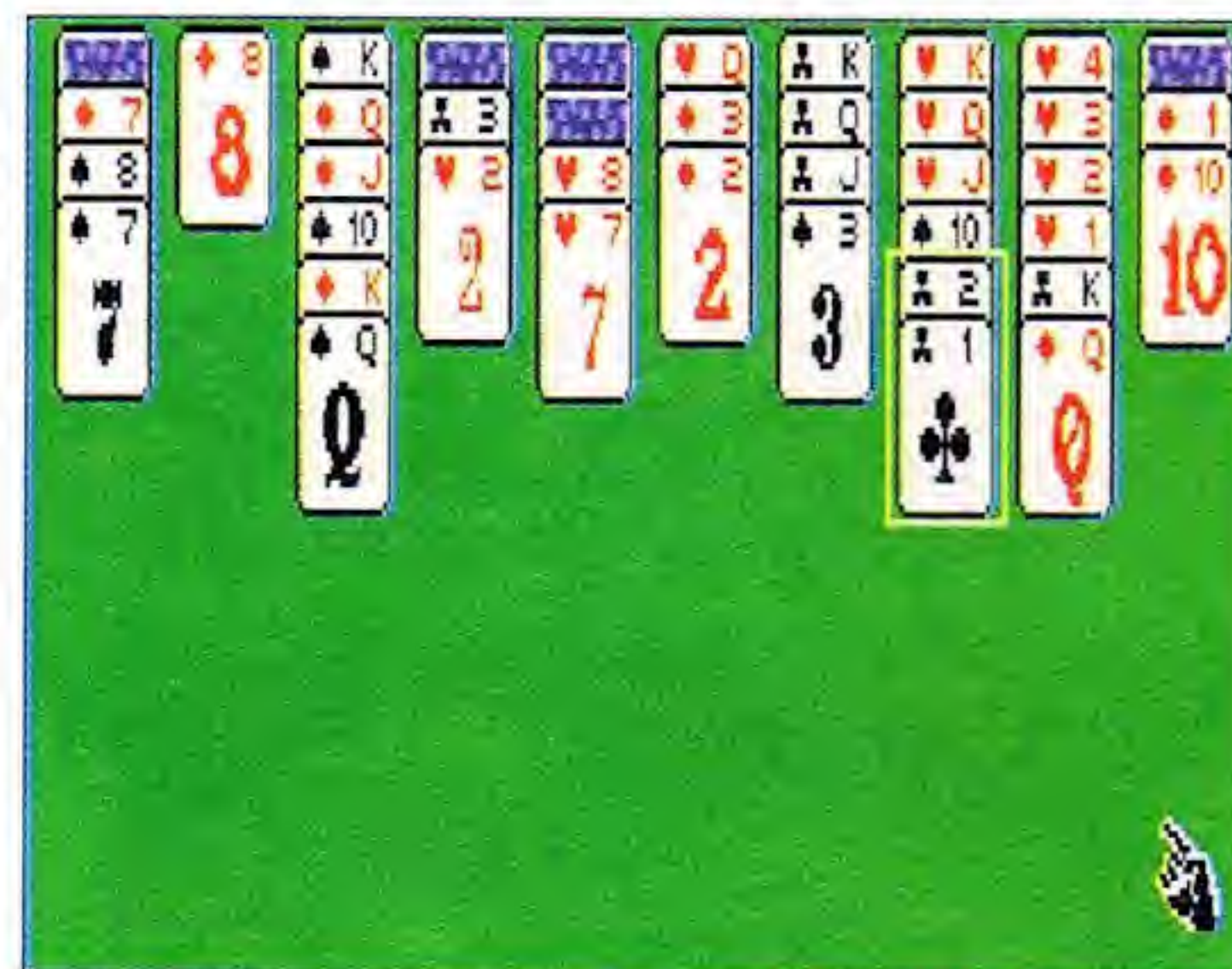
Low resolution is ideal, although I'd advise using the control panel to change any yellows in the palette to darker colours, otherwise some of the falling blocks will be difficult to see.

All three games feature high score tables which can be saved to disk. As a long-time Tetris fan I tend to find most copies disappointing or flawed, but this is among the most

playable implementations I have happened upon. In fact, all three of the games work well and hold the attention.

Nostram is a game I remember first seeing a couple of years ago. It is a platformer with graphics which have been strongly inspired by (if not directly ripped from) that Bitmap Brothers classic, Gods. However, this is no bad thing. The main character is a little slow and unresponsive and the flip-screen scrolling can be annoying, but there are a lot of locations to explore and fans of platform puzzlers will not be disappointed.

All in all then, a great little collection of games that deserves a place in anybody's collection.



So called because it was Marie-Antoinette's favourite card game

Lay your hands
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On the side

I have a 1040 STE (one meg) and an Olivetti 24-pin 80-column printer. Could I put together a software package that would produce reasonable landscape printing in the range of 10cpi to 17cpi? This is required for the printing of Football Programs.

Malcolm Helliwell, Sutton-In-Ashfield, Notts

Your main problem is that sideways printing cannot be handled within the printer itself. It is designed to print text across the page, rather than down it. This means that all the clever stuff has to be done in the computer.

While there are some – generally expensive – word processors that can do this, your best bet would probably be a low end DTP program such as Timeworks, which can be obtained fairly cheaply these days.

Not only will this allow you to compose your pages in landscape mode, but you will also be able use a wider variety of fonts and add boxes, clip-art pictures and other flourishes to give your programmes a professional appearance rather than that “word processed” look. The only problem you may have is that your one-meg system might be a little limited for such work, and you may have to add some extra memory. That said, an extra megabyte of RAM is not very expensive, and you may find that you can get away without it anyway.

Blitting those blocks with Line-A

I have been using the Line-A function \$A007, Bit-block transfer, in my programs to access the Blitter chip. Could you tell me the advantages of accessing the Blitter directly over the Line-A function?

Also, could you explain how the 16 half-tone RAM registers are used, and for what? Finally, what do the pattern parameters do in the Bit-Block transfer Line-A function?

Matthew Tomlinson,
Kingston-Upon-Hull, Humberside

This is a tricky one. To be honest, the answer is that you shouldn't really be using Line-A at all these days. Line-A was created for early STs as a quick and dirty way to access the screen – but it did so like a bull in a china shop, with little or no regard for the rest of the AES/VDI system.

This may be fine if you are running a single program, but once you start talking about multitasking programs and desk accessories, Line-A becomes a decidedly

dodgy bet. In fact, Atari no longer support the use of Line-A in the OS of any of their latest computers. The function is only retained for compatibility with older programs, but all the new graphics modes provided on the TT and Falcon are not guaranteed to work with Line-A access.

Instead, you should use the VDI commands `vrt_cpyfrm()` and `vro_cpyfrm()`. `vro_cpyfrm()` is a special case, used to blit single bit-planes onto either single or multiple bit-plane screens, with optional colour re-mapping. `vrt_cpyfrm()` is a general ‘anywhere to anywhere’ blit mode.

Both of these modes will automatically detect, and use, a blitter if one is fitted. More importantly, they will work with any screen types – even add-on graphic cards which would never work using Line-A or direct access to the blitter chip.

Using VDI commands may be slightly slower than accessing the Blitter chip directly, but on most modern systems (especially if you use a screen accelerator such as NVDI) they will run virtually as fast as the Line-A equivalents.

The only time it is acceptable to access Line-A and the Blitter chip directly is when

serial port of the ST and provides the necessary interface with the radio transceivers.

My problem is that I would also like to run a telephone modem to provide an alternative means of access, but I obviously don't have another serial port.

Is there a way of providing another serial port on the STFM? PC compatibles have a facility for multiple comms serial ports; is there any hope for the ST? Somebody did suggest that a MIDI port could be converted for use as a serial port.

Joe Loughridge, Manchester

The MIDI port can indeed be used for serial data, but it's not ideal – especially if you want to talk to a standard RS232 device. Until recently, your best solution would have been to trade up to a Mega-STE, but there is a new product from System Solutions, due out in the next couple of months, which should solve your problem.

A small add-on board will fit inside your computer and provide two extra RS232 serial ports – at least one of which can be used at up to 115,200 baud. Presumably driven by the same SCC chip that is used in

Advice

you are 100 per cent certain of the system on which your program is running.

This either means that you must do a lot of checks to ensure that the machine is a standard ST/STE with no add-on boards, or you accept that your program will never be used on any computer but your own.

Multiple modems

I use a 2.5 Mb Atari STFM mainly for communications purposes. At present, it is used to run a 24-hour bulletin board which is accessed via a radio link rather than via a telephone modem. A dual port TNC (Terminal Node Controller; a device which acts like a sophisticated modem, but generates tones for HF and VHF radio use) is connected to the

the Mega-STE, TT and Falcon, these extra ports can be accessed via the Bconmap system provided on TOS 2.06 and above.

This extra functionality can also be provided for older versions of TOS by using the supplied HSModem driver software.

If your BBS software is commercial then you may need to get an upgrade to a Bconmap compatible version, but if you've written it yourself then you can access the extra ports with a relatively simple XBIOS call.

Calligrapher speed up

I would like to give a tip for users of Calligrapher. Are you fed up with waiting for the spell checker to work when using floppies?

Then try this: create a ramdisk of about 300k, and call it drive D. Set up RAMFILES.PRG (available on ST User issue 68 cover disk) to copy the spell checker onto the ramdisk.

You can also set up RAMFILES to copy back the USER dictionary when you've finished. Read the DOC file for details.

If you do not have RAMFILES.PRG, you can still copy the two .DCT files manually, but it is nice to have them automatically loaded for you.

I also set up Calligrapher to autoload from the floppy disk using the Install Application desktop menu option. The whole process is now automated, and the spell checker has now got a rocket up its snail-like posterior.

Andrew Hewitt, Stopsley, Luton, Beds

Thanks for the tip, Andrew. Of course, the same applies to any program which needs

More space please

I have a 1040 STE with two external double-sided drives connected. Is it possible to connect further external drives to my system? I've seen some drive units which are dubbed dual drives that contain two drives in one case.

If I connected one to my external floppy drive socket, would I be able to take advantage of the extra third drive?

J. Hardy, Colchester

I'm afraid you can't have more than two floppy drives connected to your computer due to hardware limitations. If you need extra space, I suggest you opt for a hard drive. Not only do they give extra storage capacity, they are a lot faster than a floppy.

Besides, an extra drive will not greatly increase the efficiency of your system. Check out publications such as Micro Mart. I have often seen hard drives between 20 and 50Mb for sale at prices equivalent to a new floppy drive.

to access large disk files regularly, of which spell checking is an ideal example. You must obviously have a reasonable amount of RAM in your machine to enable everything to fit into memory in one go.

You also need to ensure that your programs allow you to specify the directory path for dictionary files, etc.

There are plenty of other PD ramdisk and loader programs around too, so try your local PD library or bulletin board. Better still, buy that back issue of *ST User*!

Hash by the pound

I own an Atari 520 STE and an Epson-compatible printer. My problem is that when using HiSoft BASIC to print program listings, the hash character (#) which precedes channel numbers in file access commands is printed as a pound sign.

Is there any way I can prevent this? I know that you can get printer drivers for word processors, but what about for programming packages?

I am also thinking of starting a public domain library, selling disks which contain pictures scanned from the pages of magazines. Can you

Freely distributing such copies would have the weight of the law down upon you pretty sharpish. Several PD libraries have already been prosecuted over such material, and that was merely for a few isolated cases of images and sampled music being used within demos. The simple answer is unless you want to clear the rights for every photo you use, forget it.

Border blues

It was not long ago that I started getting annoyed that the ST uses such a small amount of the screen, leaving those irritating borders.

Then I remembered that it is possible to do overscanned pictures, but I had never seen one. Suddenly I saw several programs that actually ignored the border and drew on top of it.

After I saw this, I really wanted to know how it was done. Is there an address that I can poke to overscan the screen by removing the border? If not, is there a program that overscans the ST's display?

The main reason for wanting to know this is that recently I purchased the Graffiti Video genlock, and wanted to create scrolling credits for videos that come on at the bottom of the

is, as far as I am aware, no software that is sophisticated enough to work out the necessary timing loops to allow overscan on a standard screen for the purpose you describe.

All of which leaves you with two options: first you could sell your STE and get a Falcon, which can do overscan in software. There are several Genlock add-ons available for it, including a new one coming up from Titan, and the results would be outstanding. If this is too expensive an option, you could try to obtain a second-hand STE, to which you can then add your Genlock and an overscan modification. If you decide to do this, get in touch with System Solutions (0753 818816) to check that their overscan system will work with your Genlock.

It's a kind of Magic

I have a 1040 STE which I'm very pleased with. However, I am now totally fed up with the GEM operating system. I find it's sluggish and lacks any real power.

I want a multi-tasking operating system but am not too impressed with MultiTOS. I have been told that an application called NVDI is available which replaces the slow VDI graphics routines which are responsible for screen updates.

Can you suggest a suitable multi-tasking operating system and whether NVDI really does provide a good increase in performance?

S. Whiteley, Gloucester

tell me what items of equipment I will require? Would I be infringing any copyright laws?

K. Jennings, Herefordshire

Your printer problem is an age-old chestnut which stems from the good old days when the ASCII 7-bit character set was invented in America. Although their own dollar and hash symbols were included, there was no character defined for a UK pound sign.

Printer manufacturers decided to reassign the little-used hash character (ASCII 35) to represent a pound sign in the UK. Most printers have an internal dip-switch which you can change to select UK or US operation – and several other countries too, in fact.

This feature can also be controlled by software. The Epson command sequence R is used to select the US font, while R selects the UK font. So, the simplest answer is for you to change the dip-switch inside the printer to use the US font as its default.

Then make sure that any programs which do require a pound sign initialise themselves correctly using the R sequence. Don't forget to also tell them to reset the printer to its default state when they exit.

As for your second question, the one thing that you will definitely need if you go ahead with your PD library of scanned magazine pictures is a good solicitor!

All books and magazines, including any photos within them, are protected by copyright. You are not permitted to copy any portions for any use whatsoever without written permission of the copyright holders.

screen and go off at the top. Please can you help me? I have a 520 STE upgraded to 1 megabyte and TOS 1.62.

Anthony Leech, Cullompton, Devon

While reading your letter I was poised ready to tell you where to get the appropriate hardware mod to upgrade your machine for overscan – until I got to the last line in which you state that you have a 520 STE.

Unfortunately, STEs cannot be upgraded to give overscan due to the fact that several of the necessary chips are now combined into one package, preventing access to the relevant signals.

The software overscan modes which you describe are very intricate system hacks, and as such they are highly timing-critical. There

I understand your disappointment with the level of performance given by GEM. Unfortunately, this is due to the operating system having been written with C, which is relatively slow compared to custom written machine code.

The ideal package you require is the MagiC multi-tasking operating system from System Solutions. What's even better news is that System Solutions are bundling NVDI with MagiC for a real bargain price of £69.95. MagiC usually costs £59.95 so you are getting NVDI for a mere tenner.

NVDI gives an excellent boost in performance and combined with MagiC's already fast and optimised code, will give you both your multi-tasking environment and performance increase.

Got a problem?

Are you at the point of taking an axe to your ST? Do you want to pulverise your printer? Well just count to ten and relax. Then, jot down the problems you are having, along with a detailed description of your setup.

Include information on the type of ST you have, the TOS version (if known), what peripherals are attached and any extra hardware that lurks inside your computer (accelerators, graphics cards and so on) and I'll do my very best to come up with a solution.

For those who have had problems and overcome them, chances are that someone somewhere is having the same problems and would benefit from your advice.

So get in print and send any tips or suggestions that other users may find helpful to: André Willey, Advice Service, Atari ST User, Europa House, Adlington Park, Macclesfield SK10 4NP

SERVICE

Advice SERVICE

Environment variables

Starting this issue, the Atari ST User Advice Service will boast an extra page every month, allowing us to tackle some topics in greater depth than space previously allowed. Often this will be a programming matter, although there's no reason why we can't cover other subjects – so please write in with your queries and we'll try to answer them. You can also contact me directly by Internet electronic mail (my address is andre@cix.compulink.co.uk). In fact, for this first extended Advice Service, we have a question posted on the computer conferencing system CIX:

Environmentally unfriendly

I must admit this environmental variable stuff is still a bit of black art to me. Might it be a good subject for an article?

Paul Sutherland
(psutherland@cix.compulink.co.uk)

Environment variables – which have nothing at all to do with Ozone and CFCs, as suggested by cglawley@cix – are a way of storing information about your computer system so that every program has easy access to that data. Within reason, any short pieces of text can be stored as environment variables, but the most common use is to define the various directories where you keep particular files.

Normally you define all your environment variables at the desktop level. Although there's no reason why you can't create new variables from within a program, any such variables will only be available to that program and any child programs run from within it.

The main desktop environment variables cannot be changed from within other programs.

The format of an environment variable is very simple. First there's a name which describes the contents of the variable, then an equals sign, and finally the contents themselves. For example:

```
CIXREAD=E:\CIXREAD\
PATH=.,C:\,C:\MULTITOS\
TOSEXT=TOS,TTT
```

In the above cases, the variable CIXREAD= is set to point to a specific path in which the Cixread program and its support utilities will look for their data files. PATH= specifies paths that the desktop will use to find its own files. You'll note that there are three paths here, separated by commas.

These will be searched in turn for the required files. Older systems use semi-colons rather than commas as separators.

The final TOSEXT= variable is not a path at all, but specifies the file extenders to be used when determining whether a file is to be run as a TOS or GEM program.

Using environment variables

Now you know what an environment variable actually is, how do you go about using them within your own programs? Well, there are two options available to you. First, if all you need to do is to find the contents of a specific variable, you can use the `shel_envrn()` AES call.

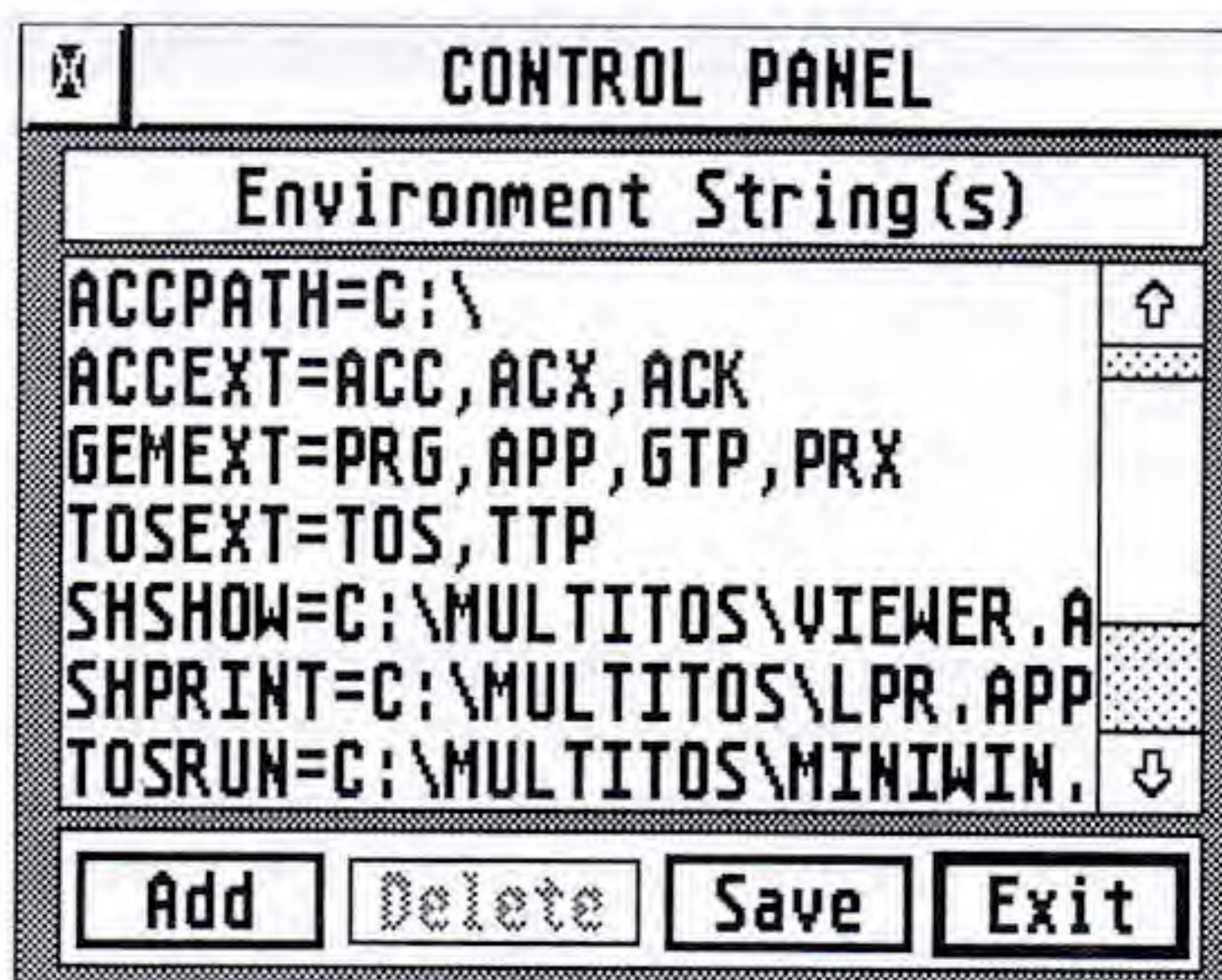
This call takes two parameters, a pointer to the search string, and a longword which will contain the results of the search.

The search string is always of the form `ENVNAME=`, where `ENVNAME` is the name of the environment variable you wish to find, always in capitals.

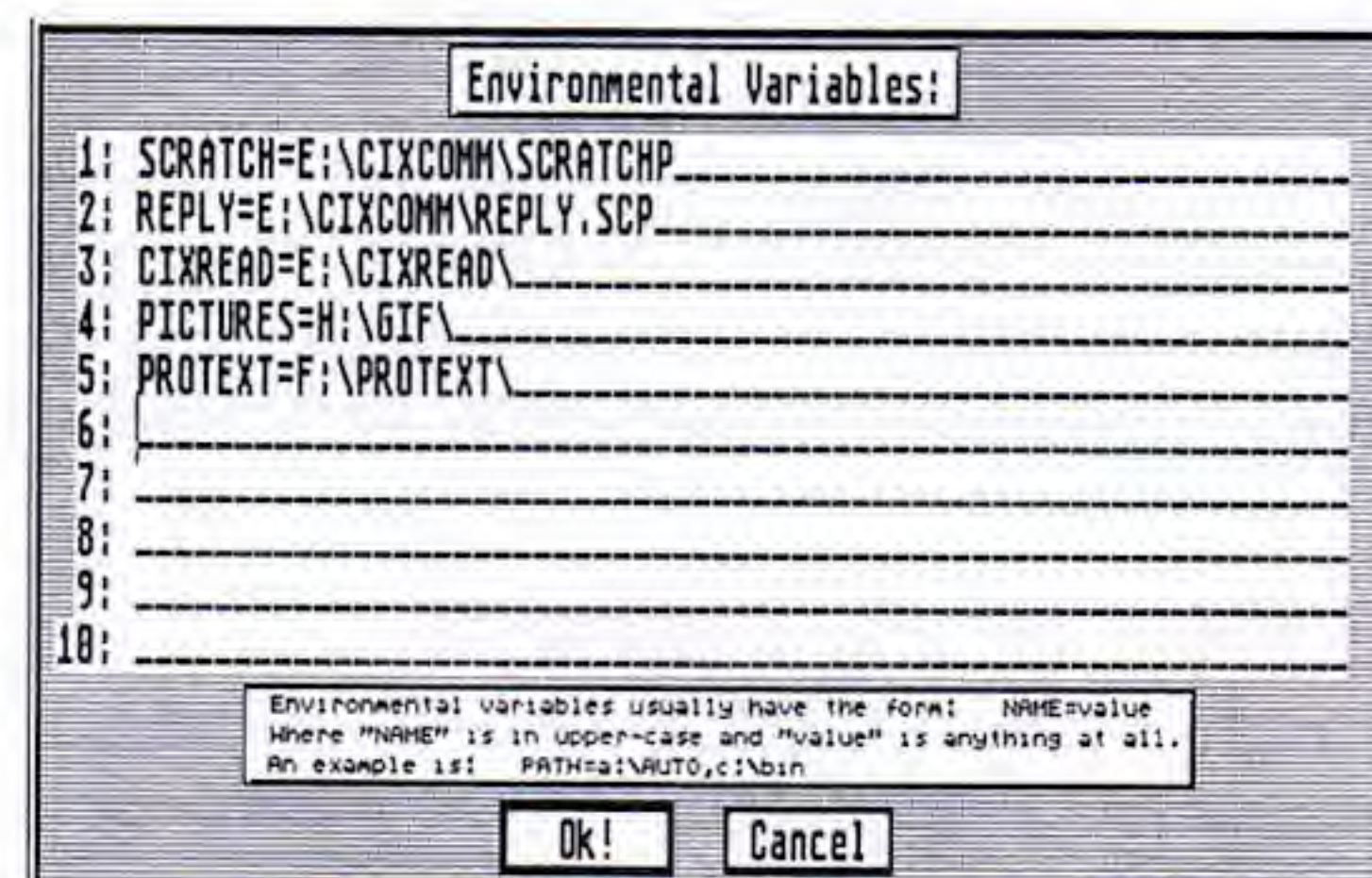
The equals sign must be given, otherwise the system could get confused between variables such as `GEM=` and `GEMDOS=`. The search string should be null-terminated – i.e. there must be an ASCII zero byte at the end.

When you request the contents of an environment variable using `shel_envrn()`, the call will return a pointer to the required string in memory.

If the requested variable was not found, a value of zero will be returned, so don't forget to check for this before examining



When working from the GEM desktop there are several utilities to allow you to set up your own environment variables, such as this CPX module



Most alternative desktops, including NeoDesk, allow you to set environment variables directly

the string's contents. The string will start with the first character after the equals sign, and again it will be null-terminated. Here's an example of how to find the contents of an environment variable using GFA BASIC:

```
~SHEL_ENVRN(address1,"PATH=")
IF address1>0
  PRINT "Variable PATH= contains
";CHAR{address1}
ELSE
  PRINT "Variable PATH= not found"
ENDIF
```

The other way to access environment variables is via the pointer stored in the basepage of your program. At location `basepage+44` there is a longword which points to the start of the environment variable list.

Each individual variable ends with a null byte, and there is an extra null byte at the end of the list.

If you need to modify some environment variables – for example, before passing them to a child program – you should first copy the existing list, variable by variable, into a buffer and change it as required.

Then call `pexec()` or `shel_write()` to run your child program, passing a pointer to your new list. Without this pointer, the child program will inherit the same environment variable list as its parent.

ARGV parameters

There is one other use of environment variables of which you should be aware. Due to a limitation in GEMDOS, there is a limit of 125 characters for any commands given as parameters to a program. Since this is woefully inadequate for many programs which require complex setup information, the Atari Extended Argument Specification (ARGV) was devised. This basically allows command line parameters of any length to be passed to a child process by means of its environment variable list.

To call a program in this way, the command line given to `pexec()` should contain just the first 125 bytes of the command line, plus a null byte. The initial length byte, however, should be set to 127 to indicate that the ARGV system is being used. Similarly, if you find a length value of 127 in your own program's command line, assume that ARGV was used to launch it.

The real (full length) parameter list is then stored after a dummy environment variable called ARGV. The format of the subsequent data is as follows, where <null> represents an ASCII 0 byte:

```
ARGV=<null>
Path and file name of child program<null>
Command line parameters<null>
```


Old TOS-ers

Despite Dave Cusick's comment (Sept issue, page 20), there are still a lot of us out here running early TOS (1.02 in my case). With care the ST is a sturdy little beast and my 520STFM has been in regular use with very little attention, a 1Mb upgrade and double-sided drive since 1987.

Which brings me to Don Maple's excellent article (Sept issue page 32) on patches for TOS – a clear (at least with a magnifying glass) summary, the like of which has been long overdue. But where are the patches?

At least the best and most essential should be on the CoverDisk. I scanned back issues and found some on the March 1993 disk with an out of date README from Atari's John Townsend. Can you trickle them all onto spare space on future disks please?

Rick Parsons, Bristol

We received many letters about Don Maple's feature, which does seem to confirm your view of coverage of this particular area being "long overdue".

I would have liked to complement the patches feature with programs on the CoverDisk, but it was one of those spur-of-the-moment and out-of-the-blue feature ideas which formed late in the production process. By this time the disk had already been commissioned from Andrew Wright, our disk editor.

In fact, the idea occurred to me only because I found myself needing a certain patch program to cure a serial port problem and was surprised at the number of patches out there, as well as confused as to which one was the best.

I had already informed Don to get in touch with the various authors of the programs for permission to put them on the next CoverDisk, and in the end we had well over 1.5Mb of programs.

So turn to page 30, check out this month's CoverDisk and you will find some of the best and most useful patch programs selected by Don himself. I hope you find them useful.

Not just a toy

I was extremely interested in Günter Minnerup's article (Issue 104: ST in evidence) showing the professional and important work to which Atari computers are put.

Such news is good news for those of us who have always maintained that the Atari is much more than a games machine. Well done

Got any comments? Then this is the place to send your views to

Write Now

Günter for exposing the ST as the truly versatile computer it is.

L. Worley, Southampton

Glad you liked the article. Who knows what other scientific areas could be secretly utilising the ST's versatility? If anyone has any news of Atari computers being used in other commercial areas, write in and let us know.

Missing chip

Shortly after buying my Falcon I started thinking of upgrading from the 4Mb capacity to 14Mb, and eventually I couldn't resist opening up my Falcon to see just how easy it would be to do this.

Atari have taken a step backward in not having standard SIMM sockets to allow us to simply fit SIMM memory modules. Why is this so? Surely it would have made sense to have SIMM slots, particularly considering 4Mb is not much for a computer with memory hungry capabilities such as multi-tasking and 16-bit graphics. Was this a ploy by Atari to force us to buy their make of memory boards? I think so.

R. Askew, London

The type of memory card present in your computer does depend on which distributor you get your Falcon from. Our office Falcon was obtained from Silica Systems and the 4Mb memory card in it has an industry standard 72-pin SIMM socket containing (obviously) a 4Mb 72-pin SIMM.

Other machines purchased from elsewhere may have surface mounted memory.

Now before you start thinking about possibly fitting an 8Mb or (if you can afford one) a 16Mb 72-pin SIMM module to replace the 4Mb one, it won't work. The card's circuitry is designed only for the 4Mb SIMM module.

However, Silica does supply a card with four 72-pin SIMM slots ready to accept up to four 4Mb SIMMs which, although adding up to 16Mb, only gives you the Falcon's maximum memory limit of 14Mb.

The board costs £49.95 without memory, so things aren't as conspiratorial as you seem to believe regarding memory upgrades. A flick through most PC magazines will reveal many vendors selling 72-pin SIMMs at relatively reasonable prices. Silica Systems can be reached on 071-580 4000.

Jaguar availability

Where can I get a Jaguar from? I have been to my local computer stores but they have none in stock. I thought that they were readily available but this doesn't seem to be the case. When can we see sufficient stocks in the high street stores?

G Marley, Manchester

I'm surprised you are having trouble locating a Jaguar. I suggest you take a trip to Manchester city centre and visit the Silica Systems store in Debenhams (3rd floor).

I pass through Manchester every morning on my way to the Atari ST User offices and I decided to call in to the Silica store over a period of two weeks just to see if the Jaguar was indeed readily available as claimed in press releases. I found that they were and that they also had good stocks of the Jaguar games currently available too.

The Silica store also has an area where you can try out the Jaguar games before you buy. You can contact Silica Systems in Manchester on 061-832 8666.

Ziping along

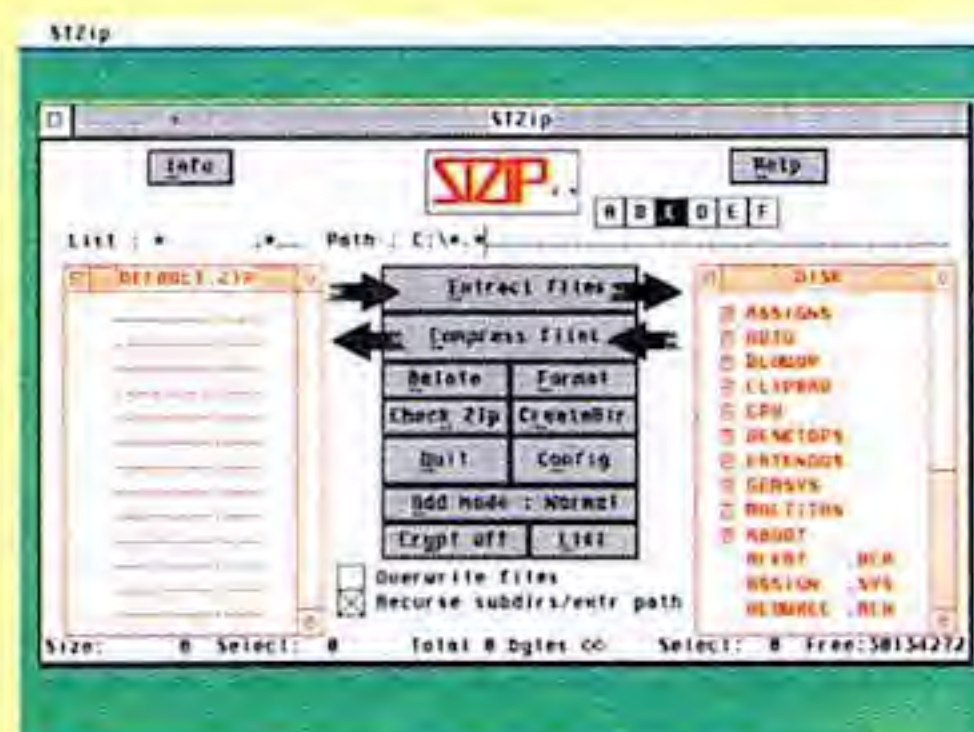
I am soon to step foot into the world of comms, long overdue as many of my friends are now travelling the information highway. Most of my friends are using PC's and we are all avid short story writers.

We are looking to combine our talents to create a mini novel and intend to use our modems to send each other text files for ideas. However, I'm a little unsure about the best archiver to use to reduce the size of the sometimes large text files before transfer.

Also, I need compatibility between PC's so that files archived on my Falcon can be extracted on my friends' PCs. Which program is suitable for my needs?

C. Carson, Sheffield

I would strongly recommend ST Zip (currently at version 2.6 I believe) and written by Vincent Pomey. Its files are compatible across Atari and PC so your friends should have no problems extracting them.



ST Zip. Probably the best archiver in the world

Waiting to hear from you...

To join the ST chat show drop a line to The Editor, Write Now, Atari ST User, Europa House, Adlington Park, Macclesfield SK10 4NP

New Age PDL £1.75 EACH

Unless otherwise stated

All disks require a COLOUR system unless: 'H' - High resolution monitor required, 'A' - Any setup suitable.

FALCON 030 - ALL HD DISKS

- FALC 2 - Falcon Boot 1.2, Backward 2.24 (ST emulator), New Depack, Text Files, Desk Copy, Deskpic 1.05, Sysinfo, DC Xtract 2.1, Revive, SpiritED 1.3 (utils).
- FALC 9 - Grotesque (Excellent), Gourd, Speeder, Plasma 30 & 50, Intel + more! (demos).
- FALC 31 - Temptation! The first disk of an EXCLUSIVE pack of JPEG pictures of gorgeous girls. Excellent quality pictures and the three disk pack contains no less than ninety pictures! Yes 90! Disks 2 & 3 on FALC 32 & 33.
- FALC 35 - Nethack 3.1.1 - 2 Meg memory+. Brilliant dungeons and dragons game.
- FALC 36 - RDE 3.1, Toswin 1.4, Lha 2.22, Zoo 2.1, Zip 2.3, Gem Bench 3.25, Good Backup 1.13, Boot Init 1.1, Ecoply 1.5, Fcontrol, Shbuf 1.3 (utils).
- FALC 37 - Fractal Playtime, Gemview, Delmpaint, Gix Gif, Binaris 2.0 + more! (art).
- FALC 52 - System Audio Manager 1.1 - assign samples to events, Digitape 2 demo (music).
- FALC 77 - Emacs 3.11, Everest 1.5, KM Term, Atomik 3.5, X-Menu 1.3, Profile 1.43, Rezfoller (run RGB stuff on VGA monitor), Fullres 1.01, Swabs, Dclock 1.0, Fuzzy Clock 1.14.
- FALC 96 - When Dreams Become Reality (RGB), Warum (RGB), Inconvex (RGB) (demos).
- FALC 103 - Oxyd (excellent!), Des Lasers et Des Hommes (3D shoot em up), Masters of Chaos (Dungeon Master clone), Tran, Ishar Editor, Mario Kart demo. (games).
- FALC 106 - Falcon Flight Demo - real time zooming demo over fractal landscape + great music.
- FALC 107 - Crime by the DNT crew, Magnet by Alphatech, Bobs-1. All RGB/TV only. (demos).
- FALC 109 - DMB icons - two large sets of replacement icons, Before Dawn screensaver 1.25.
- FALC 110 - Vidal - easy to use TGA viewer, Rainbow demo 0.5 - Truecolour art package.
- FALC 112 - Mahjong II - German version of this classic tile game. Disk approx 1/2 full.
- FALC 113 - Margo demo (4meg+) - digitised pictures of a woman modelling a skimpy bikini!
- FALC 114 - Multi-Dialogue 1.3, Master Browse 3.2 - excellent text file viewer, T-Cache 6.0.
- FALC 115 - Octalyser 0.8 - another 8-track tracker ported from the STE + docs & source code.
- FALC 116 - Papa was a Blade Runner (4meg+) new demo by EKO, very good. RGB/TV only.
- FALC 117 - POV Raytracer 2 on 2 disks, zipped & expands to nearly 5 meg! £3.50.
- FALC 119 - Moving Pixels Demo (VGA) - 4 meg+ - a mega-massive demo that requires 10 megabytes of hard drive space! From Australia, this basically shows off the Falcon itself - the sort of thing you'd see in a shop window, covering graphics, sound and productivity. Very good. Five disks - £8.00!

GAMES

MEGA-GAMES PACK ONE!

No less than ten disks crammed to the brim with archived games (de-archiver and printed instructions supplied) to squeeze on an amazing 117 games covering board/puzzle/strategy/arcade and adventure. For a full list ask with your order or if not ordering, send a stamp. All should run on a colour system with 512k and be STE compatible! You will need about twenty disks to unarchive these disks onto! AMAZING VALUE FOR MONEY.

117 GAMES - JUST £14.95!

- GAME 168 - Napoleon - a 'Risk'-style game of war and strategy. 'H'.
- GAME 185 - Oxyd 2 - the sequel to the brilliant Oxyd, much harder than the original. 'H'.
- GAME 186 - Tetris - new Tetris type game. 'H'.
- GAME 11 - A Question of Snooker, Pinball, Devestator, Roll n Nudge, Ranger.
- GAME 78 - Popeyed - a pop music game with an adult theme.
- GAME 83 - Grandad & the Holy Vest - superb animated adventure. 1 Meg+.
- GAME 104 - Blatt! - A very nice version of Tetris. STE ONLY.
- GAME 117 - Fast Freddy - lovely platform game with superb graphics.
- GAME 131 - Glass Buttock of Tharg - save the land from the evil buttock! - 1 Meg+.
- GAME 132 - Psycho Pig - two disk platform game, very cute. £3.50.
- GAME 139 - Grandad II - the sequel to Game 83, comes on 2 disks 1 Meg+. £3.50.
- GAME 148 - Operation Blue Sunrise 3 - massive STAC adventure game. 1 Meg+.
- GAME 150 - Course Angler 1.02 - go tackle fishing on your ST!
- GAME 151 - Sim Pig! - a brilliant pig farm simulation! Like Sim City & Sim Earth.
- GAME 157 - B17 - bomb the buildings, F-16 - very good flight game, 8 missions.
- GAME 178 - Argon, Out, Codename Bomb, Pyramid, Disk Hunt, Sirtel, Turbo, War Jeep, Plumber, Picker, Planet Man, Uboat, Ypsilon - 13 games!
- GAME 179 - Asteroid, Bang 3, Battle, Bellum, Quiz, Blaster, Chunks, Europe, Explode, Fuzzball, Gems, Invaders, Megaroids, Micro, Octopod, Othello, Pac Man, Plant, Rockfall, Tanx, Tennis, Wall Street, Zappy.
- GAME 180 - Mystic Well, Deep Lair, Football, Harris Goes Skiing, Haunted House, Invaders, Jumpster, Roam, Stoneage Deluxe, USA, Zym, Firestorm.
- GAME 181 - Utopos 1.5 - very slick STE only Oids/Grav type game, Endurance - 3D game.
- GAME 183 - Towers - a great new Dungeon Master Clone - the best yet! 2 disks (1Mb+) £3.50.
- GAME 187 - Karate Champion, Hector and the Mutant Vampire Tomatoes - nice platform.
- GAME 188 - Premier Mahjong II - excellent version of this superb tile game. 60Hz only.
- GAME 189 - Cud Lee's Quest - platform game for kids, Mindmelt - roleplaying fantasy game.
- GAME 190 - Quest for Knowledge - quiz type game set in a maze arena.
- GAME 191 - Walls of Illusion - yet another Dungeon Master Clone, good one though. 1 Meg+.
- GAME 193 - World Fighting Championships - beat up opponents from all over the world.
- GAME 198 - Roll-It - ingenious puzzle game with 40 levels, a sort of ball/tile game. 1 meg+.
- GAME 199 - Skulls - A flash STE only version of Minesweeper from the PC, good. 1 meg+.
- GAME 201 - It's A Mug's Game - good overhead view boxing game with nice graphics etc.
- GAME 204 - Gone to the Dogs - bet on the races! Grav - good arcade game based on Oids.
- GAME 209 - Money Mania - collect all the money from each screen, loads of nasties etc. Good.
- GAME 210 - Ruthless, shoot em up, Spherical - good platform game, Serendipity - good puzzler.

BUDGIE GAMES - £2.75 EACH

- BUGAM 89 - Horse Racing Simulator for 1 to 5 players. Buy/sell and bet!
- BUGAM 104 - Jetpack - another faithful clone of a classic Specy game.
- BUGAM 113 - Football Tactician - formerly a £20 release! Excellent!
- BUGAM 121 - Super Scramble - take a trip to the 8-bit days with this shoot 'em up.

DEMOS

- DEMO 356 - Kuba Club Culture Mix Pack 1 - 6 great bits of club music.
- DEMO 355 - The Brace Demo - nice auto-running multi-part from Diamond Design.
- DEMO 351 - The Edge of Panic Demo - a good STE only demo by ACCS.
- DEMO 350 - Exhaust demo - another good STE only demo by ACCS, 1 meg EXACTLY!
- DEMO 342 - Sid James Demo - clips from the films - STE only 1 meg+, 2 disks £3.50.
- DEMO 335 - Reality is a Lie - a 13 screen demo by Psychomix, very good. 1 meg+.
- DEMO 333 - Cemetery demo - a good digi-music demo.
- DEMO 330 - Beginning of the Ending - this demo actually plays in the background of a game of breakour which is played with 5 balls! Hows your concentration.

ART & GRAPHICS

- ART 1 - A disk full of 23 miscellaneous utilities including viewgif 1.2.
- ART 51 - Crackart 1.36 - latest version of the best ST art package! 1 Meg+.
- ART 128 - Gemview - new version of this superb viewer/converter.
- ART 157 - PAD 2.4 - English version of this high res drawing package. 1 Meg+.
- ART 172 - Paintshop Plus 2.03 - A commercial quality drawing package.
- ART 187-196 - Temptation! Volume 1 - the first pack in a whole new range of top quality pictures of tempting girls! Two versions (please state which) - one for STFM and one for STE which takes advantage of a 32,768 colour palette! EXCLUSIVE to New Age PDL! Ten crammed disks at just £15.00!
- ART 209 - Erotic Dreams slideshow - all pictures of Supermodel Cindy Crawford.
- ART 212/213 - POV Raytracer, the best raytracer around! 2 disks. £3.50.

SOUNDTRACKER MUSIC

- TRAC 129 - Four, Profunk, Cult 2, Cult 3, Federal Force, Rave 1.
- TRAC 128 - Con, Short, House, Jewel, Spassong, Celtic 6, Rappit, A-Team, Sweet Dreams.
- TRAC 127 - More Lemmings, Backpopped, Psychic 1, Bushfire, Donna 2, Ace Base, Echoing.
- TRAC 126 - Scrambled Mind, 1+ World, Wyre It, Hope Part 2, Lotus Turbo 2, H-Metal.
- TRAC 125 - The Loader Final, Artificial, Finally I Play, Space Journey, Sili.

WORDPROCESSING & DTP

- WORD 1 - ST Writer Elite, EDI Text, Zap ST, ST Page, Typist, Desk Accessories. 'A'.
- WORD 4 - First Word + tools, Grammar checker demo, Spell Binder, Text Filter. 'A'.
- WORD 5 - Calamus Demo, no save function but you can print. 'H'.
- WORD 8 - DB Writer 1.4 - very slick wordprocessor with many features. 'H' 1Meg+.
- WORD 9 - Calamus Support disk - loads of utilities for Calamus and fonts etc. 'H'.
- WORD 12 - Papyrus Office Demo 2.26 - good document processor with fonts etc. 'H'.
- WORD 13 - Calamus S demo - fully functioning except save. 2 disks. £3.50. 'H' 1 Meg+.

BUSINESS

- BUSI 2 - Sheet 2.0, Dbase One, First Base 1.6, Home Budget Template. 'A'.
- BUSI 4 - Opus 2.2 - brilliant spreadsheet. 1 Meg+. 'A'.
- BUSI 6 - Double Sentry Book Keeping System, Address Book. 'A'.
- BUSI 7 - Astubank 1.1a1 - complete home accounts system - colour only.
- BUSI 11 - Compact Office Management Program 2.05 - for businesses, tons of features. 'A'.
- BUSI 12 - Inventory PRO - keep track of stock levels, GP Patient Care for GPs. 'H'.
- BUSI 14 - Data Techniques 1.41 - easy to use but powerful new shareware database system. 'A'.

**FREE ST CATALOGUE
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UTILITIES & APPLICATIONS

- UTIL 2 - Startgem, Head Start 1.1, DC Clock, Disk Checker, Hard Disk Utils, Ram Disks, Hack 'H' Copy, Turtle 3.2 (HD backup), Megaformat, Memory Test. 'A'.
- UTIL 4 - Pools 2.5, ST init 3.4, Switcher - loads programs faster, 20 DC utilities. 'A'.
- UTIL 5 - F-Copy 3, DC Showit, Desk Manager, Disk Scan, Mono Emulator 5, Spool, DC Stuffer (loads 32 accs), Speech Synthesiser, Mouse Accelerator. 'A'.
- UTIL 6 - James The Butler, London Phone Codes, MenuSYS, Pinhead, Super Calendar Batch Startup, Auto Sort, Postmortem, No Bombs, E-Disk, 9 Quick Utilities. 'A'.
- UTIL 12 - Jam Packer 4, Wind-XES (Modulator control panel), Satellite 4.01, Clock Set. 'A'.
- UTIL 13 - German to English translator, fast Print, DC Salvage, MiNT, Maccal 3.0. 'A'.
- UTIL 14 - Printer Drivers inc Canon Bubblejet, Qume Daisywheel, Brother + Epson. 'A'.
- UTIL 16 - Chameleon - loads and unloads accessories without having to reboot, Sticker 3.0 ('H'), Definitive File Selector, Super Virus Killer, Benchmark. 'A'.
- UTIL 19 - Your Second Manual, Jokes, GDOS info, Bombs info + several magazines. 'A'.
- UTIL 30 - Superboot 8.1, Build Your Own Scanner, Report Writer, Disk Cleaner. 'A'.
- UTIL 35 - Cheetah 1.1 (high speed copying util), Rainbow TOS patches, Unarj 2.2. 'A'.
- UTIL 38 - Printer Drivers inc: KXP 1124, Star LC24, NEC Pinwriter, Brother, Canon, Citizen, HP Deskjet, Oki, Qume, Taxon, Toshiba, Riteman, Atari. 'A'.
- UTIL 40 - Loads of packers inc: Atomik 3.5, Automation 5, Dragon 3, Fire 2, Ice 2.4, Pompey 1.9, Speed Packer 2, Branch Always Packer. + Multi Depacker 1.5. 'A'.
- UTIL 42 - Intro Maker - mix pictures, sprites, scrolls and music together. Colour only.
- UTIL 45 - Kaos Desk 2.01, Terra Desktop 1.36 - replacement desktops. 'A'.
- UTIL 46 - STOS Shoot em up builder kit 0.6 - colour only.
- UTIL 53 - TOS Version 1.0 - allows you to run programs that don't run on your TOS. 'A'.
- UTIL 54 - Message Scroller, Archiver Shells, Envelope Printer Demo, Mega Cracker. 'A'.
- UTIL 57 - Revenge Doc Displayer 3.0, Wordfinder 3.0, Desktop.inf configurator. 'A'.
- UTIL 58 - Career Themes Inventory and Personality Tester - great fun!
- UTIL 59 - Neodesk patches - upgrades 3.01 to 3.02 and 3.02 to 3.03. 'A'.
- UTIL 60 - JC Label 1.3, Jon-Dos 1.7, Flowchart Compiler, Boot Time 2.0, Multisync. 'A'.
- UTIL 62 - BJ Chrome 1.1, Desk Master, Grocery Lister, Silk Mouse, Auto Load, Blitz. 'A'.
- UTIL 66 - Nation X utility disk - over 150 programs! Everything you need to get you started! Includes disk utils, diary, virus killer, packers etc. - highly recommended! 'A'.
- UTIL 67 - Label CAD 2.2 - design cards, posters etc. Document files on UTIL 68. 'H'.
- UTIL 70 - Route Finder 1.8 - Like Autoroute - plans journeys for you, SpiritED 1.3, Die UHR. 'A'.
- UTIL 74 - Award maker - easy to use program to create certificates with nice fonts, borders.
- UTIL 75 - Idealist 3.4 - file printer that saves up to 80% of paper used! 2 disks £3.50. 'A'.
- UTIL 77 - Before Dawn 1.25 - latest and biggest version of this screen saver. 2 disks £3.50.
- UTIL 79 - Spectrum Games - a disk full of games to go with the emulator on Util 55. 'A'.
- UTIL 80 - Terradisk 1.38 (latest), X-Jet 097, Curtains - protect your ST from snoopers. 'A'.
- UTIL 82 - Beropress 2.6 - create posters, banners, gift cards, letters etc. 'H'.
- UTIL 83 - Spectrum Emulator 2.07 - latest version - 2 disks + example progs. 1 meg+. £3.50.

MUSIC & MIDI

- MUSIC 1 - Noisetacker 1.5 - a popular soundtracker creator with samples & source.
- MUSIC 11 - Arpeggiator, Zeppelin, MIDI Beat, Project, Jukebox, MKS-50. 'A'.
- MUSIC 12 - Henry Cosh Sequencer, Composer. 'A'.
- MUSIC 16 - Yamaha PSS790 Editor, includes loads of sample voices.
- MUSIC 22 - Alchemie Junior 2.2 - sequencer with real-time, multitasking etc. 'H'.
- MUSIC 23 - Sound Merlin - good ex-commercial program, Mozart's Dice Waltz - compose music without musical knowledge. 'H'.
- MUSIC 24 - Octalyser 8-track tracker - STE only, Protracker 2.1, YM Tracker.
- MUSIC 26 - PSS Utilities disk, loads of programs including patch editor, librarian etc. 'A'.
- MUSIC 27 - Casio CZ sounds, 32-track sequencer, Kawai K1 editor, MIDI menu. 'A'.
- MUSIC 29 - Kawai K1 synth sounds. 'A'.
- MUSIC 31 - SOX 1.0, Midi Mover, TX81z Editor, Real Drumming. 'A'.
- MUSIC 32 - Tri-Sound Sequencer (Not STE), Disc Play 2.45, In control.
- MUSIC 34 - SOS 64, Guitar Professional, Unijay, Play Em 1.0, YM2149 Editor. 'A'.
- MUSIC 35 - Roland 'D' Series Sound Banks for DS, D10, D20, D110 and GR synths. 'A'.
- MUSIC 36 - Final Score 2.0 - score writing system. 'H', EKSEQ 1 - 100 track sequencer. 'A'.
- MUSIC 38 - 790 Dump, ST Sound 2 - record, play, compress and edit samples.
- MUSIC 39 - SSP PD Voicepack - patches for the Roland GM-70, TX81z, Roland D110.

EDUCATION

- EDUC 1 - Kid Music, Kid Notes, Kid Piano, Kid Puzzle, Kid Graph, Rebus Writer.
- EDUC 7 - Michael's Big Adventure - colourful graphics, easy to play. Age 8+.
- EDUC 9 - Bodyshop, Computer School 2 & 3, Butterfly in the Park.
- EDUC 21 - G.C.S.E. Higher Maths Grade Tutor, Franglais 3 - French Tutor.
- EDUC 22 - G.C.S.E. Chemistry Tutor - all you need to attain grade 'C' or above.
- EDUC 23-26 - CIA World Factbook - four disks crammed with information on hundreds of countries + weights & measures and a complete chemistry reference book! £6.50.
- EDUC 39 - Mini Magic Storybook - cut down version of the successful commercial packages.
- EDUC 43 - Professor Clever 2 - teaches kids aged 5-11 about numbers, spelling and time.

PROGRAMMING

- LANG 1/2 - Sozobon C Compiler release 2. Includes documentation, shell etc. £3.50.
- LANG 5-9 - GNU C++ Kit - Hard Drive + 2.5meg required, not for novices! 5 disks £8.00.
- LANG 13 - Professional GEM guide - 17 chapters of tutorial with C source.
- LANG 16 - STOS Tutorial and various Basic programs.
- LANG 27 - GFA Basic v 2.0 - GFA Expert - a nice GFA Basic tutorial.
- LANG 29 - STOS Tracker - adds a new set of STOS commands for Soundtracker.
- LANG 36 - STOS Extensions: Missing Link, Misty, Blitter, MIDI, STE, + 7 more!
- LANG 37 - STOS Software pack 1 - millions (almost!) of routines etc.
- LANG 41/42 - STOS 3D - brilliant extension allowing you to program in 3D. 2 disks £3.50.
- LANG 43 - A disk crammed to the brim with STOS ACBs.
- LANG 44 - STOS Adventure Creator 1.03 - write your own graphic adventures. 'C'.
- LANG 45 - Heat 'n' Serve Sozobon C - a very easy to install version of this compiler. 'A'.
- LANG 48 - STOS Extra Extension 1.91a - adds about 52 new commands to STOS. 'A'.
- STOS 15 - The latest issue of STOSSER disk magazine, tutorials, articles, reviews etc.
- BUPRO 2 - 68000 Programmers Library - hundreds of routs for games. £2.95.
- BUPRO 4 - Moving Bytes 1 - more routines for screen effects, music, scrolls. £2.95.
- BUPRO 16 - ST-68K Reference 3 - includes full data on ST internals, excellent. £2.95.

THE ST HANDBOOK - £2.50

A brilliant new magazine dedicated to PD and Shareware with stories, articles, news, reviews, competitions, charts and lots more! Issue four is now out and this issue comes with a free cover disk full of games and utilities. New Age PDL are official stockists of the ST Handbook - order your copy now! A bargain at just £2.50. Please state which issue.

ACCESSORIES & COMMERCIAL ALL ITEMS UK ONLY

- Easy Text Professional DTP (1 Meg+) £35.95
- Easy Text Professional Vector DTP (2 Meg+ & HD & Speedo GDOS) £36.95
- Introducing Atari ST Machine Code - book & disk £17.95
- Beginners' Guide to STOS Basic - 618 page ringbound manual £32.95
- IMPrint, for quality mono printouts on 9 or 24 pin printers £9.95
- IMPrint, same as above but for colour printers £13.95
- Degas Art v2.0 - computer art tutor on 2 disks £9.45
- Calamus 1.09 - mono 1 meg+ £79.95
- Mr. Smart's BIG Time - 25 commercial educational programs £24.95
- Family Roots - Genealogy Program £23.95
- ST/STE Mouse £12.50
- Quickshot Joystick £6.95
- Mouse/Joystick Extension leads £4.95
- 10 Capacity disk box (only with order of one or more disks) £0.95
- 100 Capacity Disk Box £7.95
- 200 Capacity Disk Box £9.95
- 3.5 inch Drive head cleaner £3.45
- ST or Falcon dust cover £3.45
- Keyboard Cleaner - pack of ten wipes £3.95
- Copyholders (attach to monitor to save desk space) £3.45
- Mouse house £2.95
- Mouse mat £2.95
- Mouse cleaning kit - 10 cleaning sticks and cleaner tissues + fluid £4.95
- 10 High quality blank disks £4.45
- 50 High quality blank disks £19.95
- 100 High quality blank disks with 100 cap disk box £41.95

For full details on any of these products just give us a call!

ORDERING DETAILS:

All orders MUST be accompanied by payment. In the UK send a cheque or uncrossed postal order made out to 'New Age PDL'. Elsewhere any form of payment in sterling except for credit cards. Postage for PD disks as follows: UK is FREE! Europe 15p per disk, elsewhere 50p per disk. There is no minimum order.

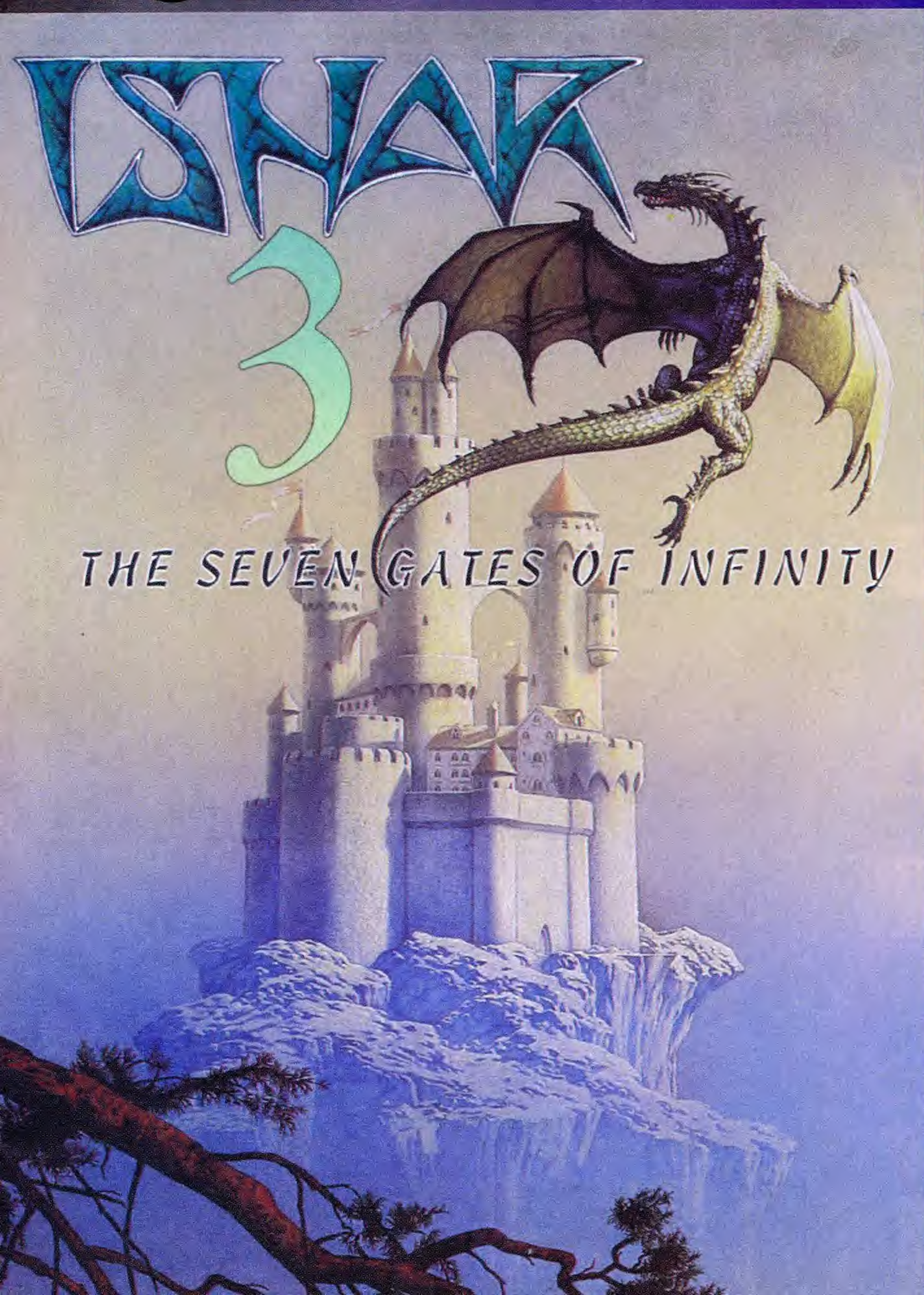
NEW AGE PDL (DEPT STU23), P.O. BOX 30, LEIGH-ON-SEA, ESSEX, SS9 4AD TEL: (0702) 480691

ST ACTION

October 1994

EDITION

- PREMIER MANAGER 2
- WINTER GOLD
- DINO DUDES
- KING'S QUEST CHEAT MODE
- ISHAR 1 HINTS & TIPS



The third
part of
Silmarils'
epic
series of
adventures
arrives on
the ST



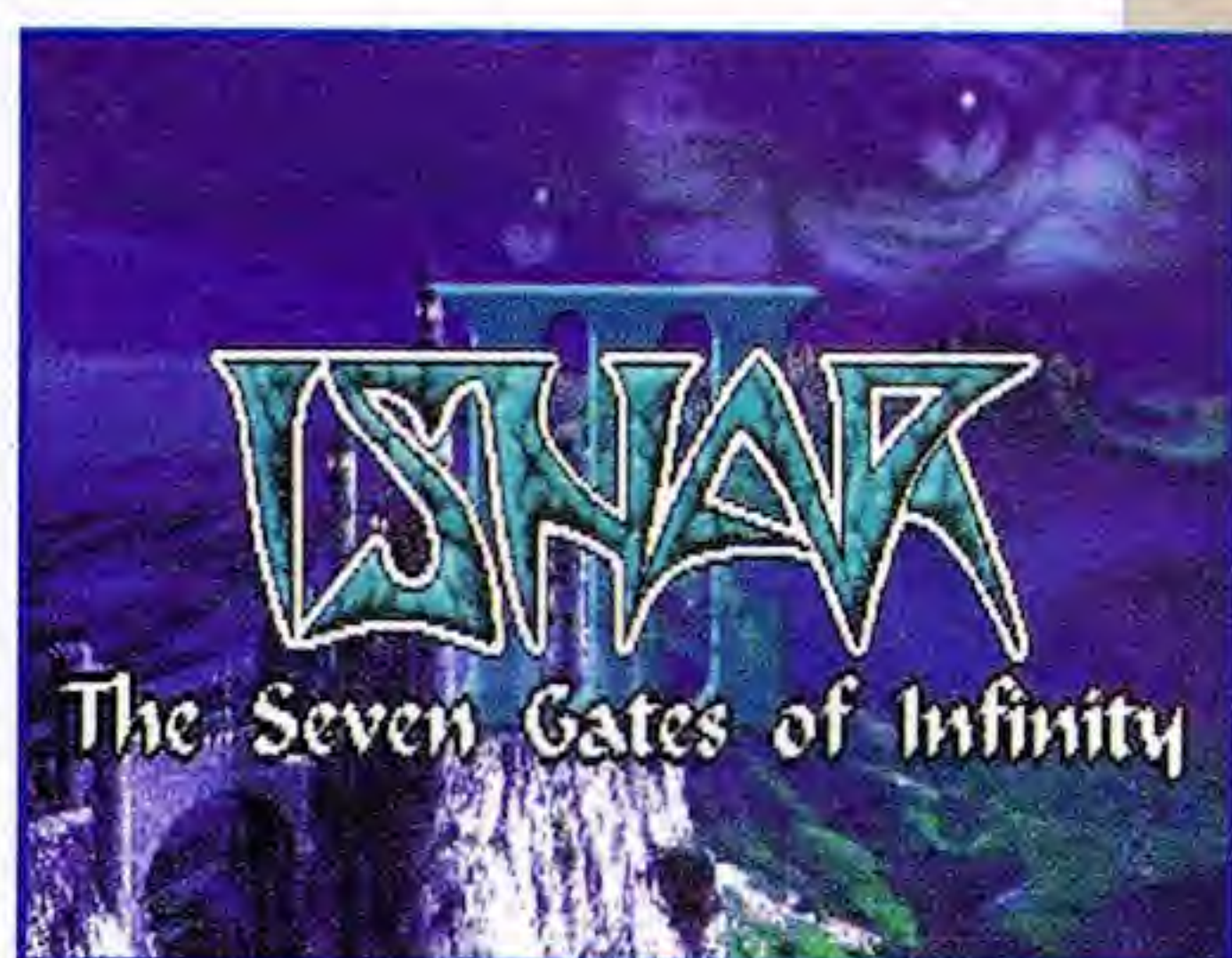
These two charming men would be happy to help you if only they weren't so engrossed in their own little battle



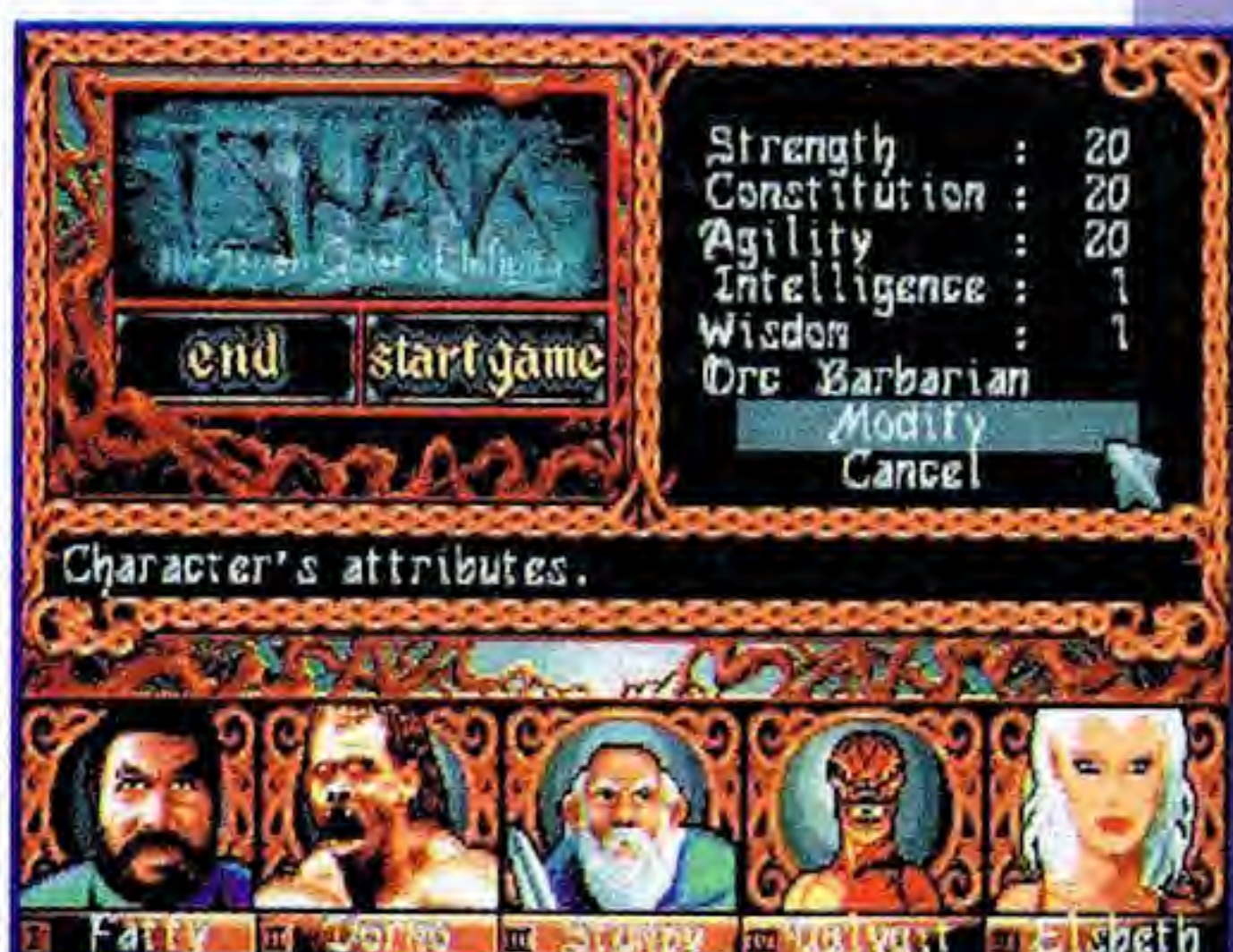
Ishar 3 offers the chance for you to meet all sorts of people, from snooty inhabitants to a male version of Barbara Woodhouse



A clip from the atmospheric but all-too-short intro sequence



This is the last part in the trilogy which has entertained so many



Generating your own adventurers can be interesting and rewarding

The final instalment in one of the most gripping role-playing trilogies ever to grace the ST

We all develop bizarre habits at one time or another in our lives. In my younger days I confess to being an avid table-top role-playing gamer, eagerly toddling around to a friend's house every Tuesday for my fantasy fix.

Along with at least five like-minded individuals, I would imagine I was massacring orcs by the cartload, quaffing ale in phenomenal quantities, and engaging in every other stereotypical action available to a fictitious fantasy character.

A large collection of Dungeons and Dragons rulebooks and background material still sit somewhere in the darkest depths of one of my cupboards, but other than that I now claim to have made a complete recovery from the role-playing bug which seems to bite most people at one time or another.

At the height of my 20-sided dice-rolling days, computers were really just beginning to worm their way into peoples' homes in a big way. Having read in some obscure fantasy publication about the seemingly boundless possibilities of computer role-playing games,

I remember being more than a little disappointed when I first sampled the computerised offerings of the time.

However, the last few years have seen a real improvement in computer RPGs and these days they can provide some of the most entertaining and absorbing games around.

One of the most notable among the new wave of RPGs was a certain Ishar, boasting tasty visuals and more than a modicum of depth to accompany them. It proved deservedly successful and inevitably spawned a sequel, which quite surprisingly managed to raise the adventuring experience to a new plateau of interest and involvement.

There might therefore be a few who would doubt that Ishar 3 could really make any significant improvements over its predecessors, but to be fair that's not really what Silmarils have tried to do with the game.

It's very much the third and final instalment in the trilogy, and so sticks closely to the tried and trusted format of its forebears. After all, as the Americans say, "If it ain't broke, don't fix it." Ishar 3 does, however, feature even more stunning visuals, a whole new variety of

ISHAR 3

THE SEVEN GATES OF INFINITY

locations to explore, and a range of new individuals to encounter along the way. It is up there vying with Legends of Valour for the moniker of Top ST RPG.

The plot, as the rather eloquent if a little confusing press release explains, is typically Tolkeinesque. It features a smattering of unpronounceable names and a suitably unlikely chain of events.

The evil wizard Shandar who was killed at the end of Ishar 2 is back, having apparently made his way back to the land of the living.

He's done this by borrowing the body of a passing dragon by the name of Wohratax, who just happens to be the lone surviving Black Dragon from some wars that took place 2000 years ago. It seems Wohratax was made immortal by the powers of Chaos and proclaimed Lord of the Sith.

Your objective is to stop him making his return in this new and more dangerous incarnation. Fortunately for everybody, Shandar has made one critical mistake. How do these people get to become tyrants if they always make such elementary cock-ups? The reincarnation ceremony can only take place at a special time.

So to prevent this happening you must travel back in time to various key points in the history of the world of Ishar.

Unless you've got a saved team from Ishar 1 or 2 which you can load in, your first job is to create one character to begin the game with. The rest of your brave band will be made

up of various strange people you encounter along the way. Inns are an especially good place to recruit hardy adventuring types.

Once you're ready it's time to plunge into the impressively detailed fantasy game-world. The game is viewed in first-person perspective with a small window showing you exactly what your characters can see.

A well designed interface makes navigating your way around the world a simple task. It's a far more enjoyable experience playing an RPG where you don't have to grapple with the interface to achieve what you want to.

The glorious graphics portray a wide range of locations from towns to forests, caves and mountains. At night the light fades so that discerning detail from a distance becomes hard. This is not a good time to wander around the backstreets of a town, unless you particularly want to be attacked by a band of crazed psychopaths.

Indoor locations such as inns, temples and banks are also lavishly drawn, creating a suitable atmosphere. The people you meet look extremely realistic too. When you

BUDGET ACTION



It's Nick Faldo, obviously taking part in computer games while his golf form is a little below par



Everybody you meet appears lifelike - indeed, the bloke on the right is a dead ringer for Richard Branson

inevitably become involved in a fight, you'll find that combat takes place in real-time and controlling a large group of characters takes

some getting used to.

One way to solve this problem is to use the tactical positioning feature to rearrange your party so that weaker characters are in the

middle and big burly types are at the front and back of the party. In this way only the

front characters need get involved and you'll have less to think about during violent encounters.

Numerous potions and spells are available for those magically inclined members of your party to make use of. Unfortunately you can't turn innocent passers-by into small fish, cackling maniacally as you do so, but you can roast them with lightning bolts and fireballs which is almost as amusing.

Essentially, this is a top-quality piece of software which will provide hours of enter-

tainment, particularly for those who like games of a cerebral nature. The graphics are some of the most impressive ever seen on the ST and unlike some other games in this genre, very few locations look the same.

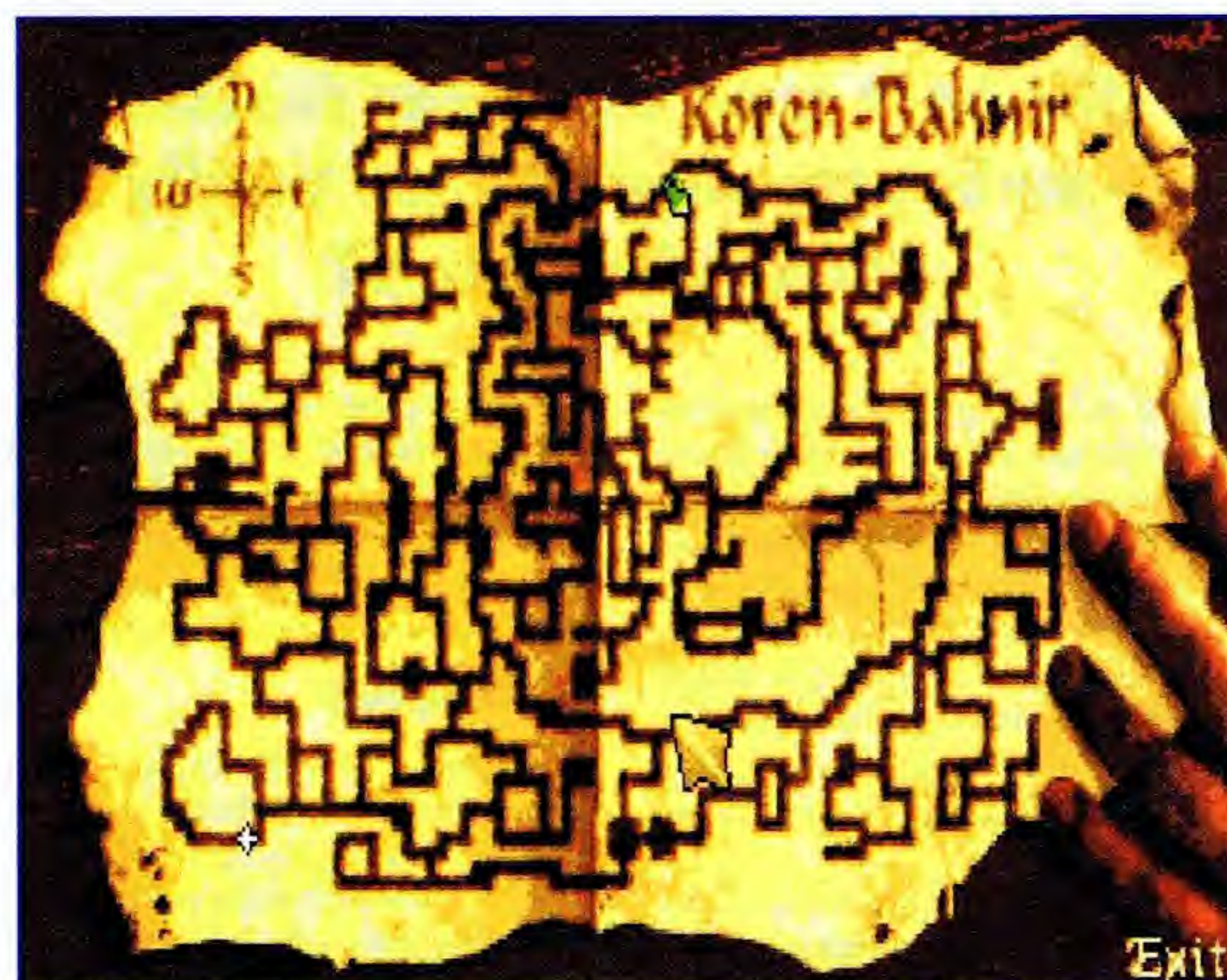
There could potentially have been problems with the game's speed because it is supplied on five disks, but the programmers have ensured that there is very little swapping to break up the flow of the adventure, and it is hard drive installable. As a result you won't be interrupted as you immerse yourself in one of the most complete computer RPG experiences I've seen.

Of course, it's not perfect: The sound isn't stunning, but that's par for the course; and it didn't seem to like running on the office STFM, although it was fine on an STE. But this could just have been a problem with our set-up, of course.

Putting these grumbles aside, Ishar 3 is one of the best new products this year that fully deserves every bit of the success it is sure to enjoy.

DAVE CUSICK

ACTION GOLD



As you explore, the computer maps out your route automatically



Bars are good places to visit for recruiting

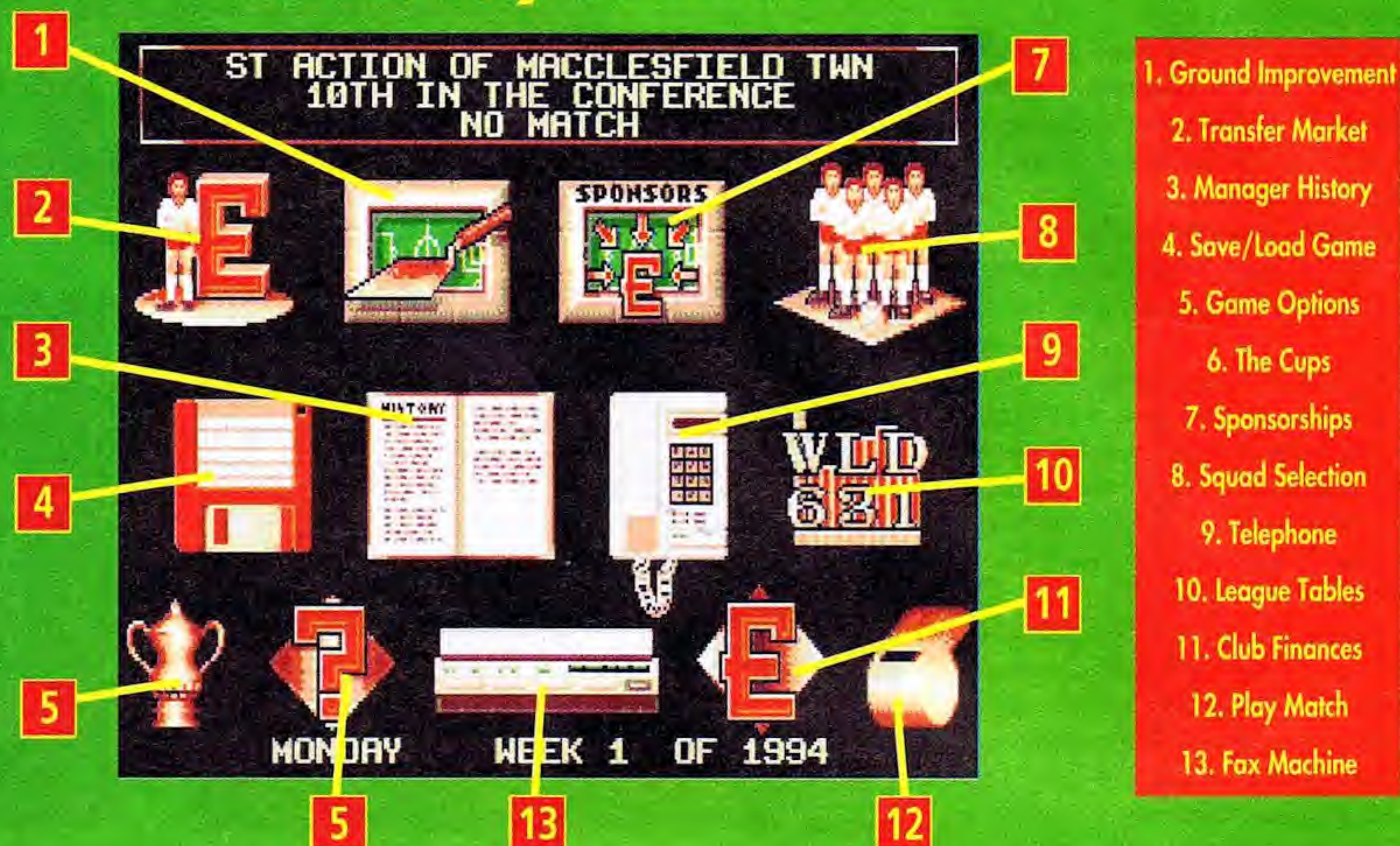


Clicking on a character's name brings up his vital statistics

VISION	
★★★★★★★★★★	
AUDIO	
★★★★★★★★★★	
DIFFICULTY	
★★★★★★★★★★	
LASTABILITY	
★★★★★★★★★★	
A suitably impressive conclusion to a series that has redefined role playing on the ST. Right up there with the best of them	90%
Publisher ▶ Daze Developer ▶ Silmarils Disks ▶ 5 Price ▶ £32.99 HD Install ▶ Yes Size ▶ 1 meg	

Icon city central

Here is a rough guide to the wonderful main options screen in Premier Manager 2. All those important decisions begin here



1. Ground Improvement
2. Transfer Market
3. Manager History
4. Save/Load Game
5. Game Options
6. The Cups
7. Sponsorships
8. Squad Selection
9. Telephone
10. League Tables
11. Club Finances
12. Play Match
13. Fax Machine

The World Cup is now over. This international tournament is nearly always accompanied by a whole host of football games, but this year when Old Mother Hubbard looked in her games cupboard, it was bare. The only game of note was an updated version of Sensible Soccer.

The new football season is now up and away. Luckily someone has decided to bring out a new football game and that's bound to please all the mad ST footy fans that are out there. That someone is Gremlin and the game is Premier Manager 2.

It is, of course, the sequel to the best selling football management simulation of last year. Premier Manager was applauded by fans and the computer press for its unrivalled attention to detail, playability and addiction.

It was extremely easy to play – beginners and experts alike could load it up and be entertained for weeks on end.

SIMPLISTIC

There was one slight snag with Gremlin's first attempt at a football management game and that was the fact that after many hours of play you found that it was, maybe, just a little bit too simplistic.

To rectify this, Gremlin have improved Premier Manager by adding even more in-depth features while still making the game easier to play – thus it should still be accessible to everyone.

I could simply list all the new features, but that wouldn't really make for very interesting

Wave your scarves in the air! The sequel to Premier Manager, one of the best ever computer football management sims, has finally arrived on the ST

reading, so I'm going to take you through the game right up to the first match of the season. After you've selected your team (from a selection of Conference teams) and entered your name, the first screen you'll encounter is the pre-season friendly screen.

You can play up to four friendly matches against anyone from within the five divisions. Most of them will be played away, but a lucrative home fixture will always be floating around somewhere.

These matches help you organise your squad for the forthcoming season, although your players can always get injured or be sent off in these events. After playing your

selection of games, the real action begins. You are presented with the main options screen which has various icons on it (check out the box on this page for more information). The screen which you will use regularly is the one where you select your squad.

STRENGTHS

It contains a list of all your players and a breakdown of their strengths and weaknesses in various areas (passing, tackling, etc). Each rating is scaled between one and 99.

A player with a score in the 90s is one of the best in the world, but don't expect to see your players skill ratings to go above 35 for

the first couple of seasons. The players health and control are scored a little differently, but the higher the rating the better your player will be.

Click on a player and you'll get a whole host of personal information, including a breakdown of their training schedule, age, contract details, disciplinary points, wages – just about everything you need to know apart from shoe size.

Another set of icons beneath this screen allows you to select different formations, various tactics, information about your next opponents and a fixture list, plus you'll be able to see what injuries your squad has got.

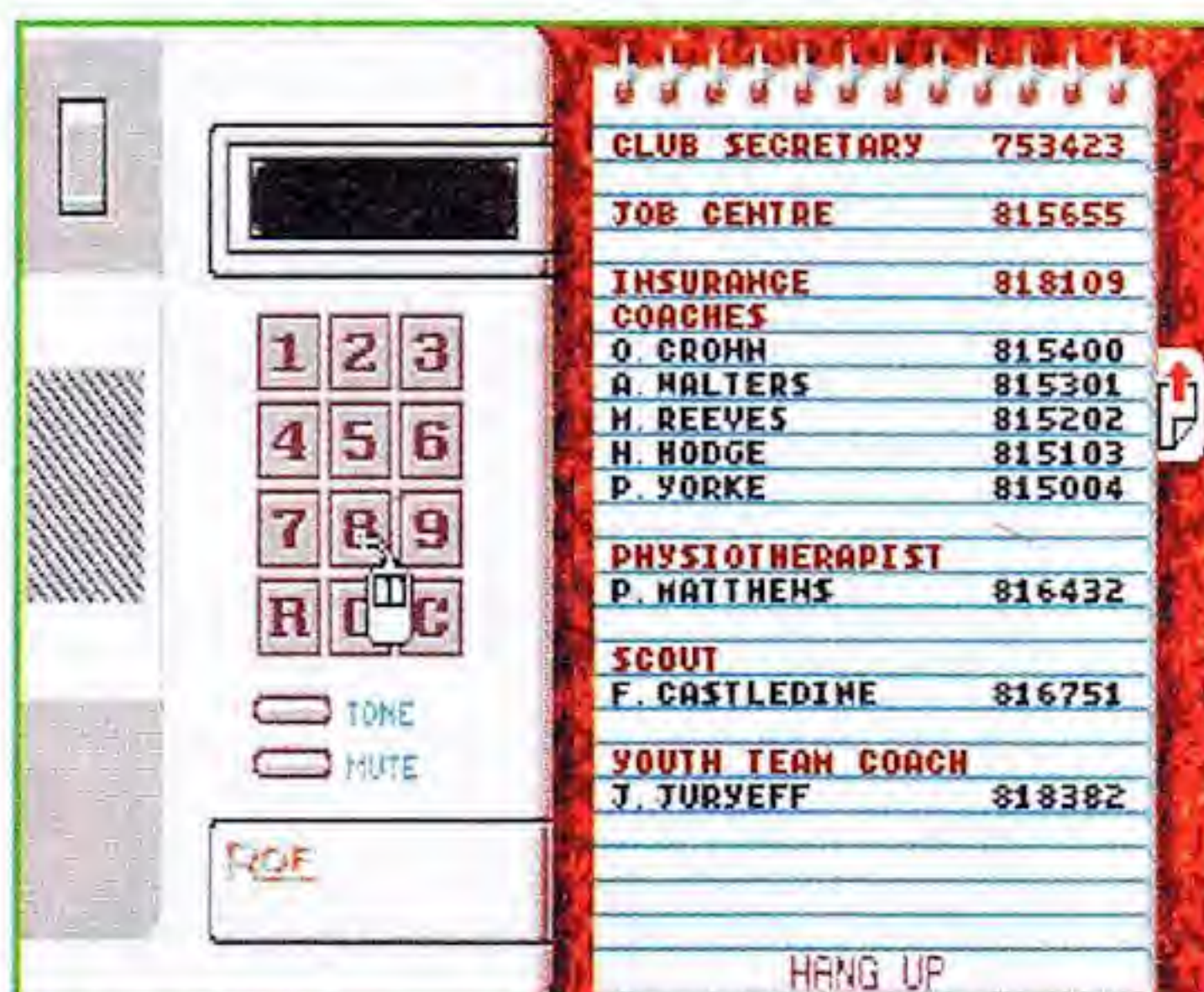
Click on the telephone icon on the main screen and you'll be presented with a picture of a phone with a notepad containing a host of various numbers next to it. By typing in on the keypad or by clicking on the buttons, you can dial each member of your staff.

Your first port of call is the job centre where you can hire various staff. Their current weekly wage is displayed, so the higher the wage, the better that staff member will be.

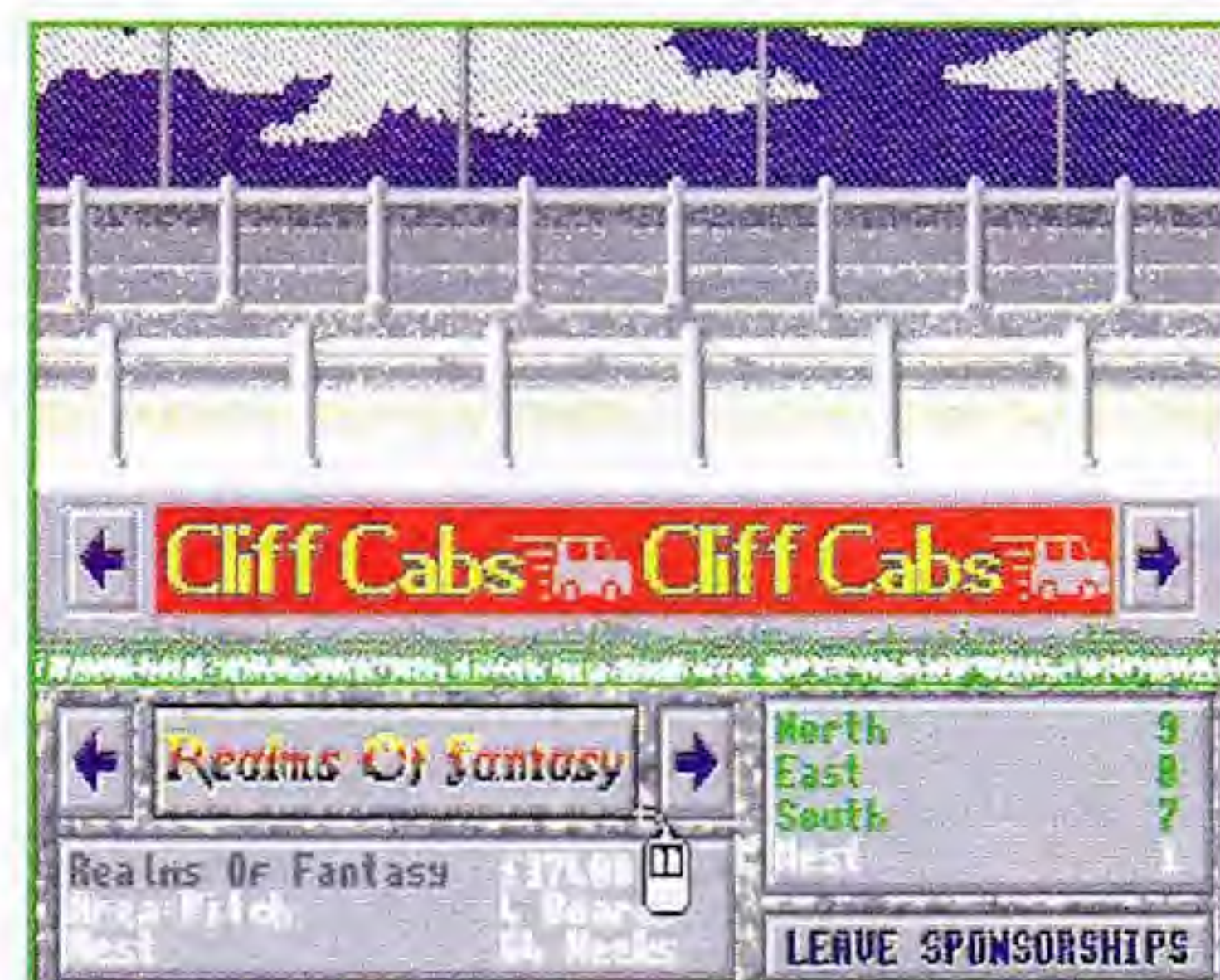
You can dial your coaches who can then



Visit the club secretary and she'll give you some information on just how good a manager you really are



Before you start the season, use the phone to call the job centre and pick up some quality staff members



Sponsorships play an important part in the financial side of running a Conference football team

allocate training routines to each individual player, or you can ring up your insurance company to get all or certain players insured.

Other important numbers include your Physiotherapist, your scout and youth team coach, plus you can ring up any of your players to offer them new contracts, bonuses or simply just sack them.

Dial the club secretary and she'll give you information on the weather, your current confidence rating with the board and the fans and your personal managerial score.

FINANCIAL

After you've sorted out the actual playing side of things, you must then turn to the financial side of running a football club. The club finance screen gives you a run-down on all your spending, whether it's cash coming in or going out. Loans can be obtained and paid off, plus things like ticket prices can be altered.

One sure fire way of making cash is via sponsorships. On this screen there is a list of would-be sponsors, with details on the number of weeks the company wish to advertise for and how much cash they will pay.

Some might offer a weekly payment which provides a steady cash flow, while others might just pay you a lump sum which is useful if you need a large and quick injection of money.

Once you've sorted your money situation and selected your best 11 players and subs, the only thing left to do is play a match. This is also where one of the major graphical



Ground improvements are a must, especially the standard of stadium safety. Don't improve and you'll end up with a big fine from the FA

you various animated sequences whenever a shot at goal or another similar event occurs.

These sequences are a major improvement upon the original Premier Manager and really add a lot more atmosphere to the game. At half-time or when you click on the

simulation.

In fact I haven't got space to tell you about improving your ground, how to play the transfer markets or mentioning the rather nifty fax machine.

Premier Manager 2 is, perhaps, one of the most addictive games you can get for the

ST ACTION			MACCLESFIELD TOWN 10: CONFERENCE		
CONTRACT: 1 £155930			HOMERAY WEEK 1 OF 1994		
TRANSFER MARKET			FROM CLUB		
AK	SK	PLAYER	FROM CLUB	DIVISION	
1	PS	LEE	MACCLESFIELD TOWN	PREMIER	
1	SH	SHARP	OLDHAM ATHLETIC	PREMIER	
1	PS	PARKER	ASTON VILLA	PREMIER	
1	PS	SHERIDAN	SHEFFIELD WED	PREMIER	
1	PS	HURST	COVENTRY CITY	PREMIER	
1	TK	KERNAGHAN	MANCHESTER CITY	PREMIER	
1	SH	WHITE	EVERTON	PREMIER	
1	PS	HILLIER	ARSENAL	PREMIER	
1	SH	WHITE	Q. P. R.	PREMIER	
1	TK	PRION	WOLVICH CITY	PREMIER	
1	SH	SHERINGHAM	TOTTENHAM	PREMIER	
1	PS	TAYLOR	SHILDON TOWN	PREMIER	
1	SH	MARHURST	BLACKBURN ROVERS	PREMIER	
1	SH	PATTERSON	BOLTON MANDARERS	PREMIER	
1	PS	BAILEY	MATFORD	PREMIER	
1	TK	MARNER	MOTT'N FOREST	PREMIER	
1	PS	LUND	MOTT'N COUNTY	PREMIER	
1	TK	TELFER	LUTON TOWN	PREMIER	
1	PS	BIRCH	MOLVERHAMPTON	PREMIER	
1	TK	BRADLEY	M. E. A.	PREMIER	
1	TK	FLEWING	MIDDLESBOROUGH	PREMIER	
1	PS	O'BRIEN	TRAMERE ROVERS	PREMIER	

Financially, new players are a bit of a reach at the moment, but in a few seasons the transfer market will need to be observed regularly

anyone! I heartily recommend Premier Manager 2 to just about everybody.

Fans of the original will definitely love the sequel as will any football management simulation beginners. A quality game that puts all others in its genre to shame.

Manager 2

ACTION GOLD

improvements has been made,

The screen swaps between statistics and animated football action. The first shows you the current score, the position of the ball on the field, a running commentary on the game and various other snippets of information, such as what state the weather is in and how many shots at goal your opponent has had.

The two panels down the side of the screen hold details of the scorers, bookings, sendings off or injuries that have taken place. The other screen flicks up and shows

"sub" button, a screen flicks up that looks very similar to the squad selection screen. From here you can make substitutions and change formations or your tactics.

There are also various bits of information on your players so that you can check on how well they're performing in the game. All that's left to do now is wait for the referee to blow the final whistle.

That's basically it, but of course you must play, at least, another 40 or so games before you finish. Premier Manager 2 is a high quality and very in-depth management

ST. The amount of options and sheer depth of the actual game is very pleasing and it's a product that will last you a very long time.

Graphically it's a little bare, but the animations are good inclusions to the simulation and when has a game of this type required great graphics anyway.

The sound is lacking too but, as before, it would be nice if it was there - but you can quite easily survive without.

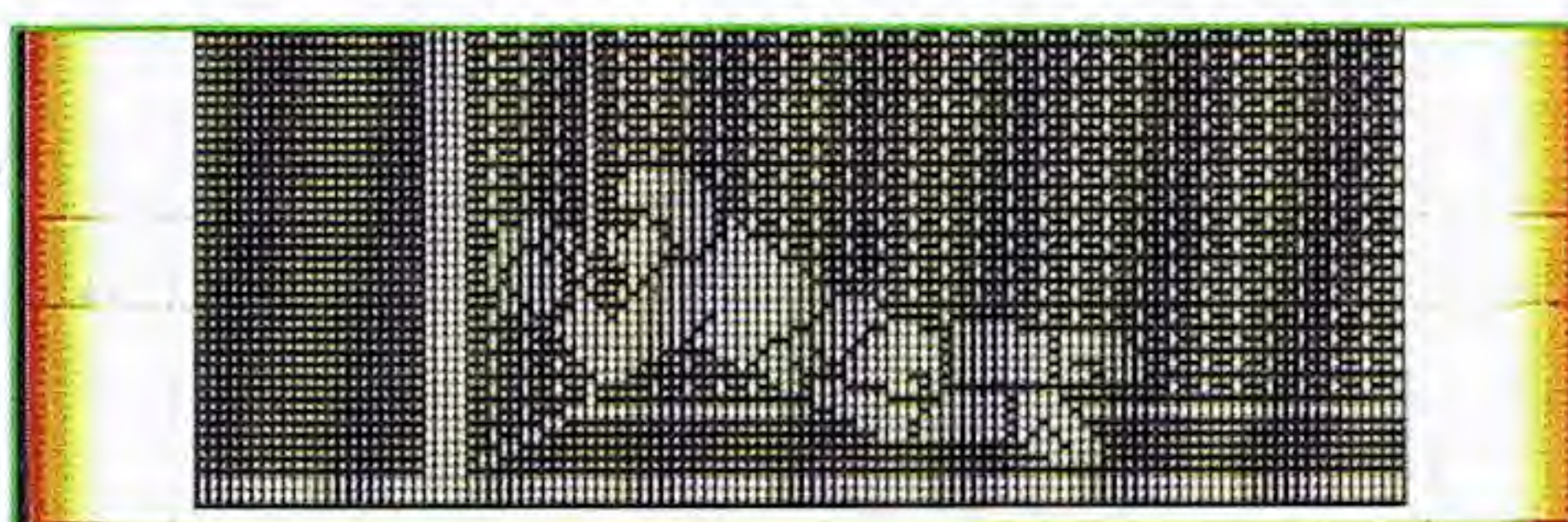
Playability and addiction-wise, you can't go wrong with Gremlin's superb management simulation.

You will always want to play just one more match and it's one of those games that'll have you playing into the early hours.

The staff at Gremlin still can't stop playing it and they've had the game longer than

NEXT LEAGUE FIXTURES	
CONFERENCE LEAGUE	
ALTRINCHAM	u BATH CITY
RUNCORN	u HEATHVA TOWN
SLOUGH TOWN	u MACCLESFIELD TOWN
SOUTHPORT	u KIDDERMINSTER
STAFFORD RANGERS	u KETTERING TOWN
STALYBRIDGE CLTC	u HALIFAX TOWN
TELFORD UTD	u GATESHEAD
WELLING UTD	u DOVER ATHLETIC
WITTON ALBION	u DAGENHAM
WOKING	u BROMSGROVE
YEOVIL TOWN	u NORTHWICH VICT

The ever-so handy fax machine will give you a run-down of the very latest football news



The new match animations have improved the game over the original and they add some much-needed atmosphere to the simulation

VISION

★★★★★★★★

AUDIO

★★★★★★★★

DIFFICULTY

★★★★★★★★

LASTABILITY

★★★★★★★★

Premier Manager 2 is jam-packed full of the highest quality gameplay that an ST gameplayer could ask for. Be warned. It's that addictive that the government should make it illegal

93%

Publisher > Gremlin

Developer > Realms of Fantasy

Disks > 2

Price > \$25.99

HD Install > No

Size > 1 meg



Stacking characters to form ladders becomes an integral part of the game



Instructions range from the simple to the obscure

Cast yourself back in time, a time when dinosaurs roamed the earth and all men looked like Bill Oddie – the prehistoric age, a subject used time and time again by film makers, authors and now games developers.

Over recent months we seem to have had something of a revival as far as the dinosaur era is concerned. What with all the Jurassic Park goings on and now all the Flintstones hype it's a wonder we're not all going completely dino mad. And now courtesy of Atari and Imagitec we have another prehistoric themed offering under the name of Evolution: Dino Dudes.

SUCCESSFUL

If Evolution: Dino Dudes looks familiar that's because it appeared as Humans on other formats. And very successful it was too. On the Jaguar it retains all the qualities necessary to follow in the footsteps of that success.

For those not in the know, Evolution: Dino Dudes is a Lemmings-type puzzler/platformer. The idea is that you're at the bottom of the evolutionary ladder, so to speak, and as the leader of a hairy, prehistoric tribe you have to climb to the top of the food chain.

You progress by discovering fire, weapons, rope and the like. Not only this but you'll have to learn how to use them to help you work your way around your surroundings. The playing area consists of a series of

**JAGUAR
GAME**

platforms scattered around the screen. The way in which they're placed causes all manner of problems, from high ledges to wide gaps. Many obstacles block your path and you'll need to use all your resources to their best advantage. Use spears to jump over precarious cliff edges or pits of lava, or take a ride to a high ledge on the back of a dinosaur.

Not all dinosaurs are a man's best friend however, and some may see you as potential breakfast so you'll have to find a way of keeping the dining dino at bay.

The basic actions available to your Dino Dude are "picking up stuff" and "forming a

ladder." By stacking your characters in this way you can move to otherwise out-of-reach platforms. Objects found can be picked up and used. Each object then reveals another panel of icons to issue further instructions. Spears are one of the first you'll discover. With the spear you can vault over chasms and other obstacles. You'll also have to learn how to throw the spear back to your other hairy team mates.

HELPFUL

As you progress, you'll find other helpful implements such as the torch. They can be brandished and thrown as with spears but

Evolution: Dino

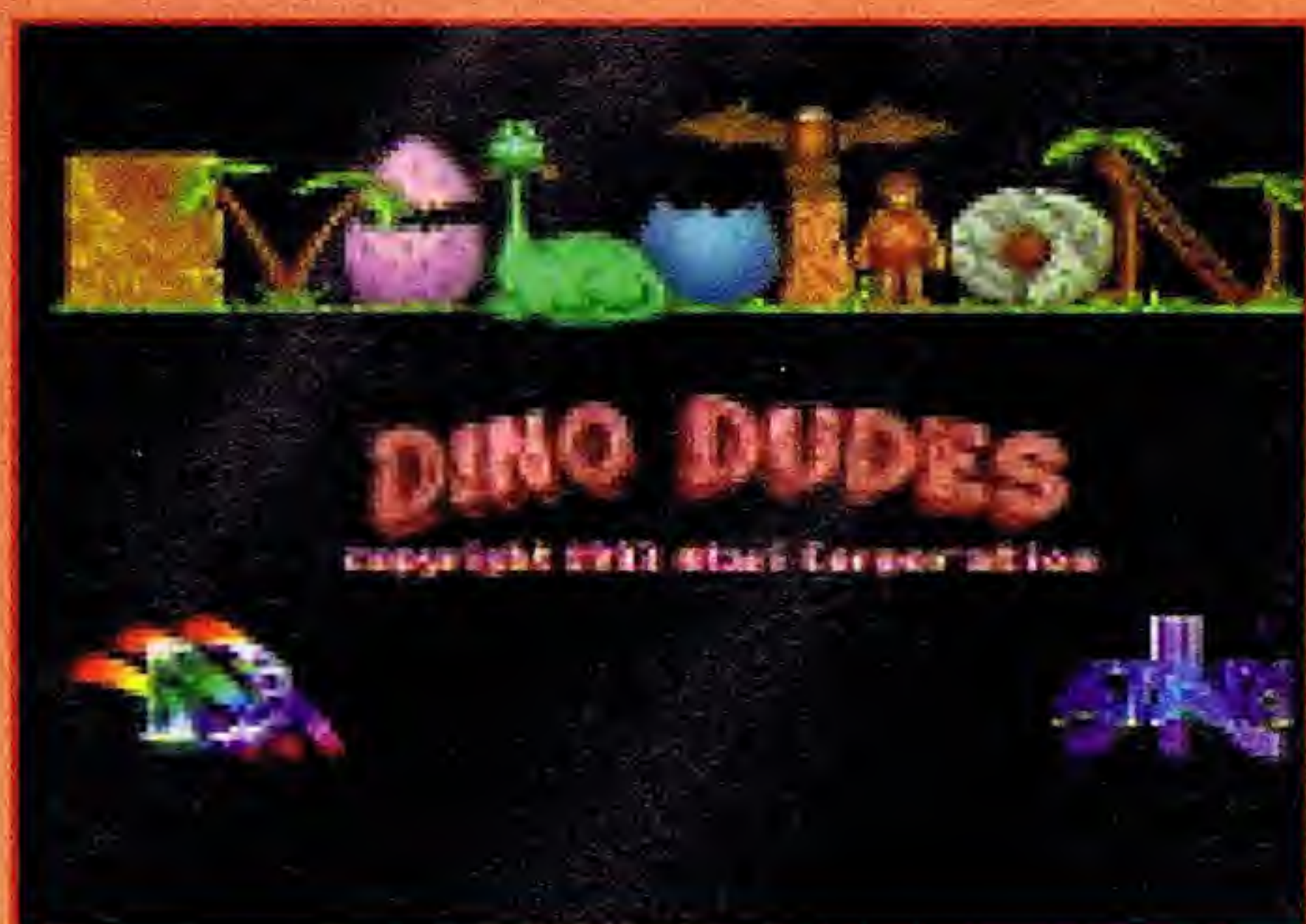
now you can also burn things. Very helpful for setting fire to vegetation which blocks your path. Next up you'll need to master the rope and the wheel. So, in your best Indiana Jones style you can fling ropes up to cliffs. And then if your bunch of Neanderthals are evolving at a fair pace you can use the wheel to ride uphill and downhill and across



Accurately pole vault to cross the pools



Ride on the backs of friendly dinosaurs



ACTION GAME

Spear the aggressive dinosaurs to clear your path



chasms. So that's the basic idea of the gameplay. Each level, and there is a grand total of 80 levels to overcome, has a set goal to reach and you should complete the level in the shortest possible time with the largest number of tribe members left. The goals vary from the obvious "Discover Fire", for

Despite being so utterly frustrating, Evolution: Dino Dudes will keep you returning for just one more go. It's frighteningly addictive and time after time you are convinced that just one more go will have it cracked. I'm surprised you got this review at all this month!

Graphically it looks superb and each level

Dudes

example, to "Reach the Goal" which involves getting one of the characters to the levels "goal block". This will then stop the clock and end the level.

More points can be gained by placing Dino Dudes onto bonus plants, either small pine trees or shrubs – and for each Dude you place on a plant you'll receive an extra 1000 points. Tribe numbers can be increased when you pick up an occasional new member, like when you rescue a hostage from a nasty tribe.

Extra Dudes will come in handy for sacrificing to the witch doctor (how nice). He will appear wearing a skull-shaped mask – treat him with caution. Accidentally running over his toes with a wheel has nasty consequences.

SPELLS

But the witch doctor does have his uses and he comes in very handy for casting spells and conjuring up objects. In return he demands the sacrifice of a tribe member.

The game requires teamwork within your tribe for it to evolve and skill to plan a quick strategy in a short time. A great deal of patience is needed as it can get really frustrating especially when your tribe members insist on not being able to jump quite far enough across gaps and the like.

is packed with fine background and foreground detail recreating many prehistoric settings. Jungles, caves and mountains are all brilliantly conveyed with bright, colourful backdrops and great attention to detail.

The sprites don't fall into the "over-cutesy" bracket either and their small size works well making them easy to control around the levels. Each is nicely animated, employing such



Keep the wheels a rollin' to speed around the levels

comic antics as scratching their heads or potbellies when they are left standing – only small details but nice touches, nevertheless!

The joypad controls have been well thought out and you can choose between two configurations depending on your preference. Each character can be controlled separately by pressing its corresponding number on the keypad which works well.

PASSWORD

A helpful 'save option' is included and can store information like the last level played, selected volume and high score. The password system included is pretty much essential and saves the annoying starting the game from scratch each time. A restart level is available to bail you out should you feel that all is lost.

You can start by playing the Easy level, should you feel you need the practice, or Normal, but if you're feeling brave, dive straight in at the deep end with the Hard levels. The harder the levels the less Dudes and the less time you'll have but the more points you'll get for finishing a level. Sound-

wise, the accompanying tune fits in with the light-hearted feel of the game and the sound effects are quite varied and humorous: kill the dinosaur and he gives out a loud groan; make your players fall off a high ledge and you hear a painful crash or a splash if they fall in the water.

This is a great addition to what is already proving to be a great collection of Jaguar games. It's a fun puzzler which really does require patience, accurate judgement and a bit of logical thinking. The game is set out well and the graphics make good use of the Jaguar's capabilities. One word of warning though: it's very addictive and very frustrating. Play and watch your blood pressure soar!



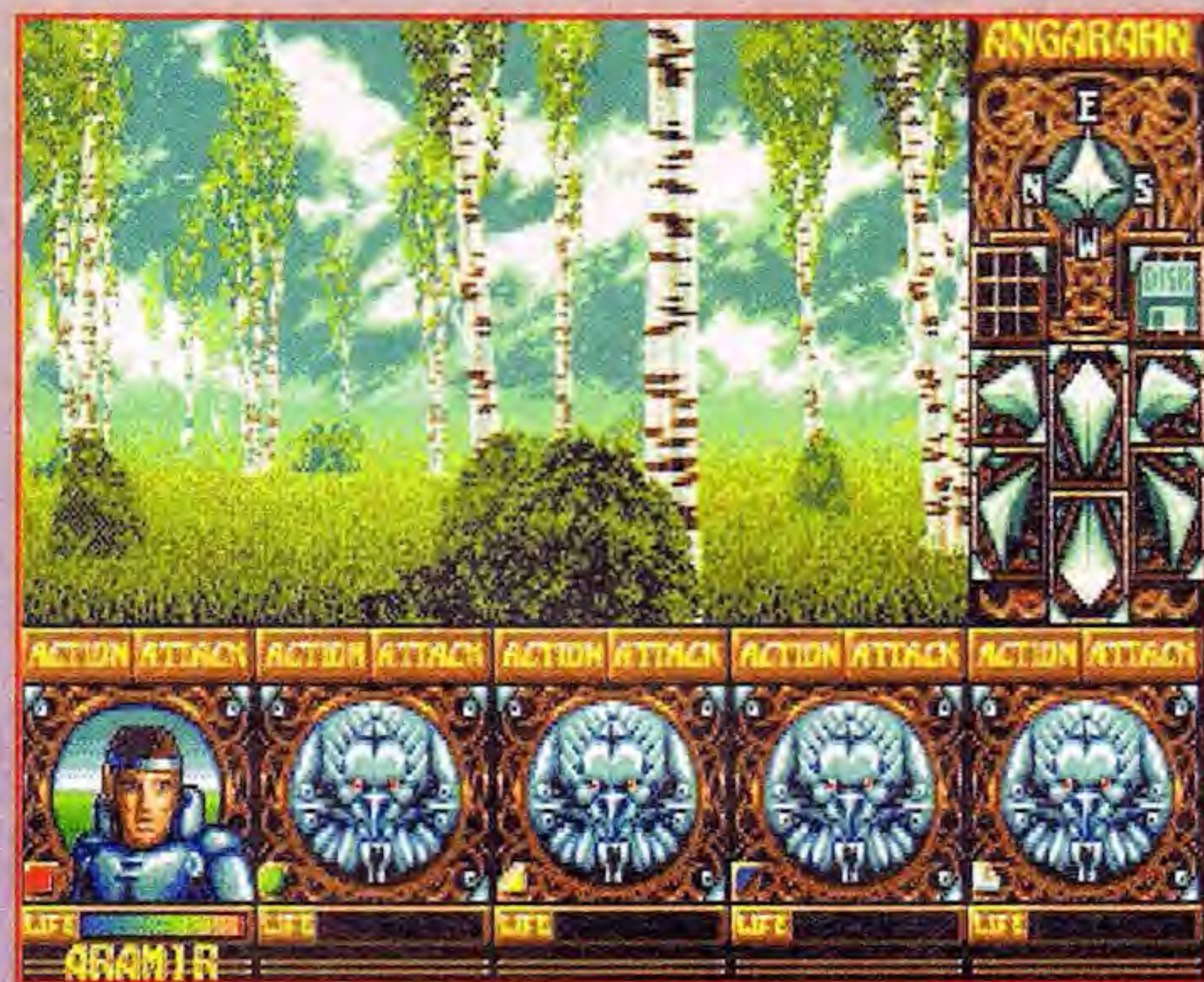
And into the ice age... with beautiful graphics all round

VISION	
★★★★★★★★	★
AUDIO	
★★★★★★★★	★
DIFFICULTY	
★★★★★★★★	★
LASTABILITY	
★★★★★★★★	★
Huge, action-packed puzzler with tons of levels and gorgeous graphics	89%
Publisher > Atari	
Developer > Imagitec	
Price > £39.99	



The start of the quest and the beginning of your battle with the evil Krogh

A few steps away from the start and you bump into Brominh. Bribe him and he will tell you which taverns to visit next



You find yourself in a forest of silver birch trees. Somewhere in here is the beautiful Kiriela who you must recruit

Your first fight of the day against a band of hungry orcs. A few quick slashes of your sword and you can be on your way



Ishar

The first part in our two-part guide to the magic and mystery behind the world of Ishar.

Jonathan Maddock guides you around Silmarils' classic fantasy adventure

Start of the Quest

Head east until you meet up with Brominh. He is a bit of a smooth talker, and if you give him a little money he'll tell you the names of a couple of good inns.

You can enrol Brominh into your party, but beware because he's a traitor and you must never fall asleep in his presence. On the other hand he can be very useful in fights as he receives blows intended for others.

Carry on eastwards. When you get near a pool, turn south and in the birch wood you can enrol Kiriela. Place Kiriela in the second line and prepare a fireball rune. Turn south-west and go as far as the village.

While in Angarah village, fight a few orcs and then visit the inn where you recruit Kirian. Next, do a bit of shopping. Then visit the house of Akeer who will tell you about the quest to be pursued.

Continue to the south-west. Skirt the bushes to the west, deal with the fierce orcs and then go back into the house and recover the treasure. On the way back pick up the teleporter which is to the east of the house and on the other side of the bushes. Teleport.

Turn south-east, cross the bridge and beware of the barbarian. He's a bit of a tough guy, but a couple of fire balls will deal with him adequately enough.

In Lake City there is a merchant, a course and two inns. Don't enrol Golnol and Nasheer in the team as they are traitors. Leave the city, go south along the river and take the first bridge you come to.

The psycho-analyst's hut is to the south and the reptile's hut is near the night prowlers. In the reptile hut you will find a message which will be decoded if one of your team members is highly skilled in languages. In the bushes there is a purse full of gold coins.

Travel east as far as Rhudgast, go north as far as the ocean, then return westward to Osghirod.

In the bushes, a knight in armour known as "White Iron" will be waiting for you. Kill him and take his helmet. Go east and right to Rhudgast.

The Dungeon of Rhudgast

Head south as far as the river then travel up-river to the east. A few dwarves will have to be dealt with on the way and on your travels you will find a purse.

Pick it up and turn North. A few steps to the west and you will find yourself in front of the entrance to the fortress.

Go inside and you'll find that it is roughly divided into two: east and west, the division being at the first crossing. In the eastern part release the handle to enter the north. You will find several labyrinths containing treasures and quite a few skeletons, which eventually lead to the north-east corner of the fortress.

There is a room containing a key and some treasure to be recovered. In this part you will find a handle. Don't open it because it jams and you will be imprisoned in the fortress. If you are exceptionally skilled at lock-picking you might want to try your luck at unjamming the door handle.

In the western part you will eventually reach a large room with two entrances to the north. The western access will lead you to a runic tablet by the way of a few spider bites. The eastern access enables you to reach the magic phial which is essential for the rest of your quest.

Be careful which route you take because at the exit to the cross roads there is a giant who can accuse you a lot of damage. Leave the fortress and return to Osghirod. Travel alongside the river to the west and take the bridge which separates Osghirod from Lotharia.

Safari to Lotharia

Enter the village to the west and along the way you'll pick up a few panther trophies. You will find an inn, a merchant and a spell-making course in the village.

Travel due south as far as the ocean and go west along the coast until you reach four birch trees. The spirit of Azalhgorm appears and gives you some vital information.

Set off again due east and along the beach. Eat the wild sempiternals and you'll find a runic tablet on a pedestal. Pick it up.

cheat mode

On the Predator's Land

Put the mental vision helmet on the head of one of your characters and travel east. If you haven't put on the helmet, the predator will remain invisible and will attack you for as long as you stay in the forest.

In the middle of the forest and slightly towards the east you will come to a clearing. In the middle of the clearing stands an isolated tree surrounded by little flowers.

The predator should be waiting for you there. If it isn't, go due west again and you should find it.

Kill the predator and collect the four magic rings which will protect you from dragon fire. Travel north as far as the river, walk along it to the east and you'll come to a bridge. Cross it.

The Guardian of the Bridge

Turn east and enter Aragarth. Then continue to the east as far as the river. This river can be crossed by a bridge, but it is ruled by a minotaur. Head north of the bridge and find a merchant. Give him 5000 and he will give you a potion which is essential for inventing an eye-opening prescription.

To the south of the bridge, the dwarf Fragorn can be found and enrolled into your team if need be. He's quite a rough character, but beggars can't be choosers. Turn right on to the bridge to battle the minotaur.

It's better to make him waste all his magic weapons and projectiles from a distance before the hand-to-hand fight. Once you have killed him, cross the bridge and enter Silmatil.

The Guardian of the Tortoise

Travel north-east to the end of the land where the giant, Gato, awaits you with his mace. Kill Gato and pick up the tortoise, Ygwen, which is hanging about on the beach.

If a fight doesn't really appeal to you, try dodging Gato and picking up Ygwen while avoiding the mace blows. It's extremely tough, but can be done.

Go south again, but be careful, warriors are awaiting you on the plain. Travel south-east to the Urshurak region. Continue southwards, skirt the ramparts, and you will eventually come across the city gate. Enter the city here.

Jon the Alchemist

Head west and enter Kandomir where there will be some orcs to kill. Enter the hut and take the parchment from Jon. It contains magic prescriptions connected with those given to you at the end of the manual.

A useful team member to recruit is Morgula the Witch. She has been transformed into a pig by the evil magic of Krogh, so be careful not to kill it. Instead, mix an "Arbool" potion in the magic phial that you picked up in the dungeon of Rhudgast.

Find the pig by travelling east from the city of Valathar until you reach the forest. Travel south along the edge of the forest and you will meet Zach the merchant who has something useful to sell. After meeting Zach go east into the forest and you'll find the pig.



Once in the village there are several things you can do, including enrolment on a strength improvement course

Inside the tavern you can listen in on a conversation for a vital piece of information, have a meal, or simply fall asleep



A good recruitment drive can always be held in ye olde local tavern. Kyrian joins the team for being able to drink 16 pints and then still perform well in a fight



Not tonight dear, I've got a headache...

A minor stroke of luck as our squad of adventurers stumble into a teleporter. Where it goes no-one knows!



King's Quest I

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classic adventure**



A small, p
pours into

King's Quest

The woodcutter speaks to you, his voice broken with sorrow.



Walk over the bridge and head west. Open the door and enter the castle. Follow the red carpet towards the king and then bow. Talk to the king. After talking to the king leave the castle. Walk over the bridge and turn left. Head north then obtain the carrot, before heading west and climbing the tree.

Once you have climbed the tree, have a look in the nest and take the egg. Descend the tree and go south. You will see a rock which you should move. Take a look in the hole where you will see a dagger which you should then pick up. With dagger in hand, move once to the north.

Now go east three times. In this location you should be given a magic spell by the ever-lovable (and probably facial hair-bedecked) nice Fairy Godmother.

If she does not appear, try moving to another location and then returning – if she still doesn't appear keep doing this until she does. Once you have the spell then head east.

Next you should move your character to



the north. Take a careful look about when you get to the beach and make sure you pick up some pebbles. Then go west, before then moving south.

You will find a walnut which you should pick up and crack open. Now go west and then south and you will come to some water. Swim through the water and then head north.

Go west and eat the house (well that's what it says here, anyway - don't ask me, I only type this...) Open the door and enter the house. Go up to the stove and open it, and also open the cupboard and take out the lump of cheese. Get the note on the table and read it. Then leave the house.

Go north four times and then west. You should reach a gate with a goat on the other side. Open the gate and show the goat a carrot which you should conveniently have upon your person - although quite why this is the case I'm not sure.

Now go south taking the goat along with you. Go west and come to the bridge. You should cross it and head west again.

Go south and you will meet a man. Look at him and talk to him. Ask him his name three times and he should produce a key. Take this from him and then head south. Go south again and you will find some clover. Take the clover and go south.

Next go west twice, then move once to the south. From here go west twice. Finally move south and then west again. You should by now have reached a house which you should proceed to enter.

Exchange your bowl with the occupant for a fiddle. Taking the fiddle with you, leave the house. Go east, and then south. Now go east again, and lastly move south twice.

You will reach a very strange looking house which you must enter. Unlock the door



solution

the south. You should come to a tree stump. Have a look into the tree stump and you will spot a pouch. Pick this up and then move south three times and then east four times.

You will then discover a bowl. Look into this and then fill it. Now it's time to head to

using the key and then open the door and go inside. Once inside you can use keys 7 and 9 to go up and use keys 3 and 1 to go down. Using keys 7 and 9, go up three times and leave the cave. Head south and you will find that you come to a tree. There should be



a hole in the tree. Look into the hole and you ought to find a sling which you should then take. Head northwards. Now go west, but as you walk into this location play the fiddle.

This is because there are giants here, and playing the fiddle causes the giants to fall asleep. When this eventually occurs, you should take the chest and go east, entering the same cave from here. Go back down through the cave using keys 3 and 1. Leave the strange house and then go east. Stay in this location until a cute little elf appears.

Talk to the elf, who should then give you a ring. Now head eastwards.

Soon you should encounter water which you should swim through and then walk east three times.

You should be standing outside the cave. Walk into it until you see a bird appear. Jump on the right side of the bird. From this screen use key 0. After landing go west. You will now come to a mushroom

which you should take and then head east.

Here you should find a hole. Jump into it and then go south. Now go west and you will meet a rat. Give the rat your lump of cheese. Now turn your attention to the door.

Open this door and go south. In this location you will come across a shield which you should take before returning to the first room. Here you will find many strange creatures and you should play the fiddle.

Go back to the king's room. You should find a sceptre here. Take this and then walk up the stairs. Go to the hole and eat the mushroom. Now go outside then head north and climb on the pail (jump the bucket).

Go to the water and dive in, then swim through the hole. You should then throw the dagger and collect the mirror. Now swim back through the hole.

Climb up the rope and head south. Here you meet water to the east. Swim across it. Move east twice and you will find a bridge. Cross the bridge and enter the castle, and then go to the king.



BUDGET ACTION

There's an out of season chill in the air as you grab your skis and toboggan and take to the mountains to get into practice for US Gold's version of the Winter Olympics

WINTER GOLD

The warm sun gently melting the icy snow. The tension building on the piste as nation takes on nation. Nerves of steel and hours of dedication and practice – the vital requirements.

The scene is set for the greatest sportsmen and women of the world to take part in the biggest and most prestigious of winter tournaments, The Winter Olympics.

It's a great display of talent, ability and skill – which is more than can be said for this dire budget release through Kixx XL.

TWO IN ONE

Winter Gold is a two-game compilation of Epyx's previous releases The Games, Winter Edition and Winter Games. So you get two different games and three completely unconnected disks, all clumsily bundled into one box.

This results in an unforgivable overlap in the actual sports included – two lots of Figure Skating, two lots of Ski Jumps and other fairly similar events under different names. And plenty of long-winded swapping over of the disks after each game to find the event you want. Minor grumbles aside and getting



Well, you try controlling a little yellow dot on an ice-rink

down to the nitty gritty, gameplay is where it really matters. So I looked, and looked again. But not a bit of gameplay was in sight, unless of course we're supposed to count this ridiculous bout of joystick breaking as gameplay.

Taking part in the sports requires different varieties of joystick abuse. To ski you push

the joystick left or right in frantic fashion while performing a ski-jump requires you to throw the joystick in all weird and wonderful directions.

At first the game promised a lot – I was quite impressed by the game's appearance and for its time it does look deceptively good, with the detailed backdrops creating the snowy scenes well. The sprites are done in an appealing cartoony way and look solid, but that is until you get to one of the ski jumps – and the stick man makes an appearance.

GRUMBLE

A stick man graphic indeed – this is supposedly to indicate distance. But now you're expected to control a sprite the size of a flea with this daft control system.

And another grumble: on some of the events the view suddenly changes. One moment you've just managed to get the hang of guiding your character down the piste or ski jump, then suddenly all you get is a completely useless view from behind the skis, for example.

To its credit though, Winter Gold does contain a massive ten events including Slalom, Ski Jump, Cross Country, Downhill, The Luge, Bobsleigh and Biathlon. So if joystick bashing is your thing then the game promises to last you a fair while.

Oh, and there is a rather nice opening



Don't be fooled by the game's attractive appearance



Yes, the little stick man at the top is you

ceremony at the beginning of each game – a quite competent animation of the lighting of the Olympic torch and the closing ceremonies and awards. But once you've seen them, well... And considering both games have the same sequences almost, it's hardly gobsmacking.

The worse thing is that it could have been good. It's a nice, unusual idea but very badly executed. The multi-player aspect would certainly appeal to people's competitive side.

Tina Hackett



Choreograph your routine for the figure skating

VISION	
★★★★★★★★	
AUDIO	
★★★★★★★★	
DIFFICULTY	
★★★★★★★★	
LASTABILITY	
★★★★★★★★	
A very frustrating title due to the badly designed controls. Could have been great – a shame!	55%
Publisher ▶ Kixx XL Developer ▶ Epyx Disks ▶ 3 Price ▶ £14.99 HD Install ▶ No Size ▶ ½ meg	

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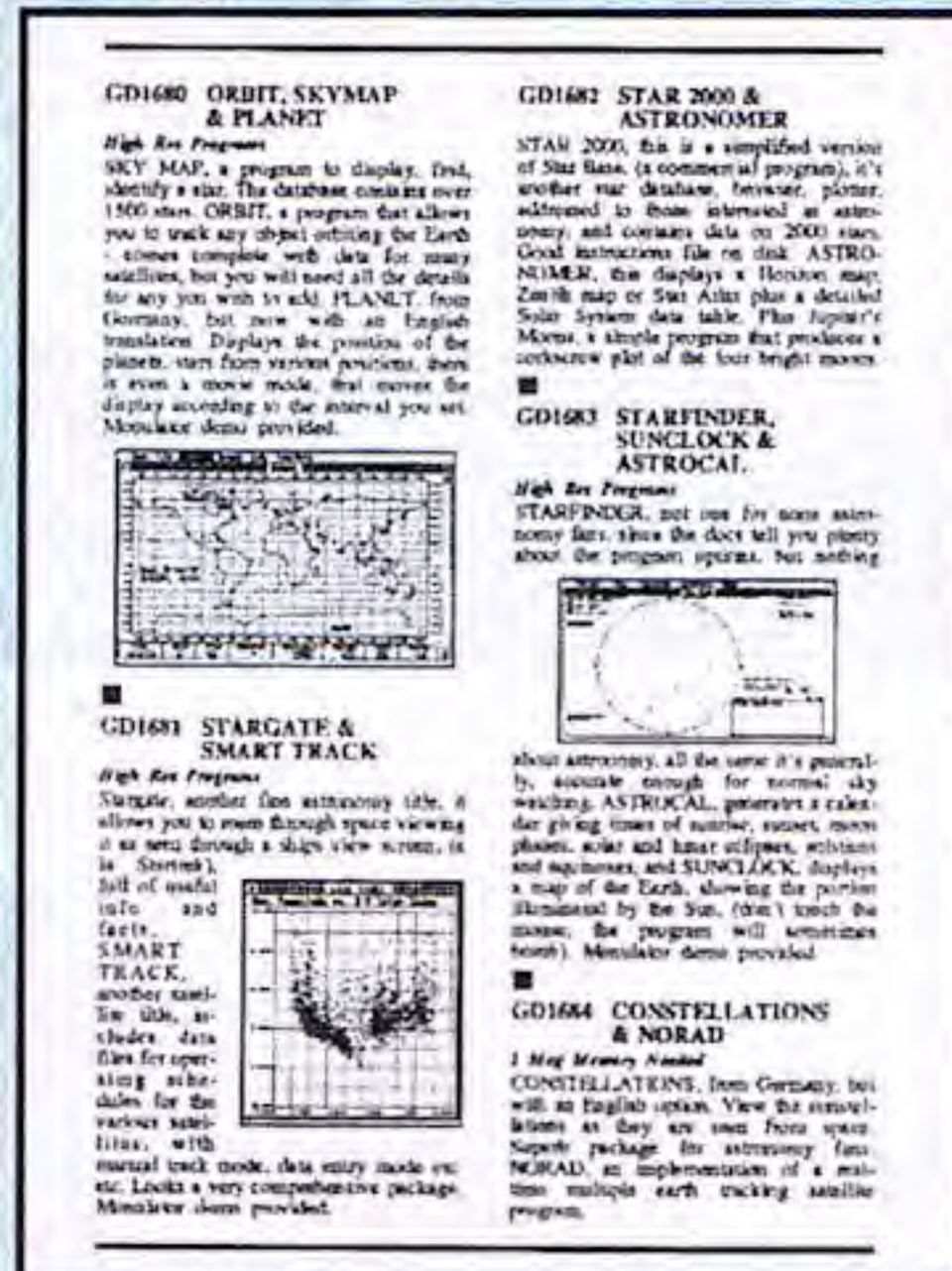
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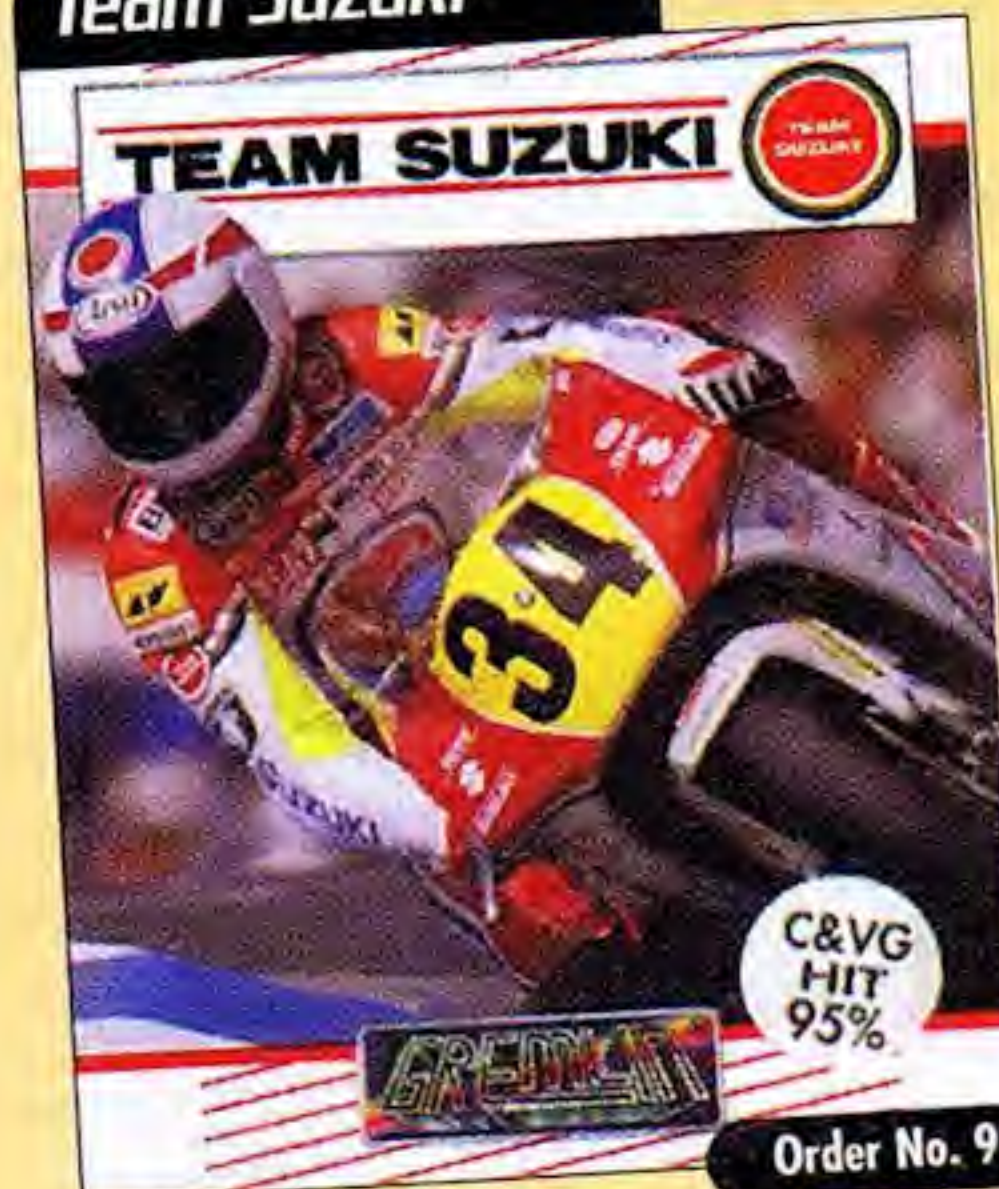


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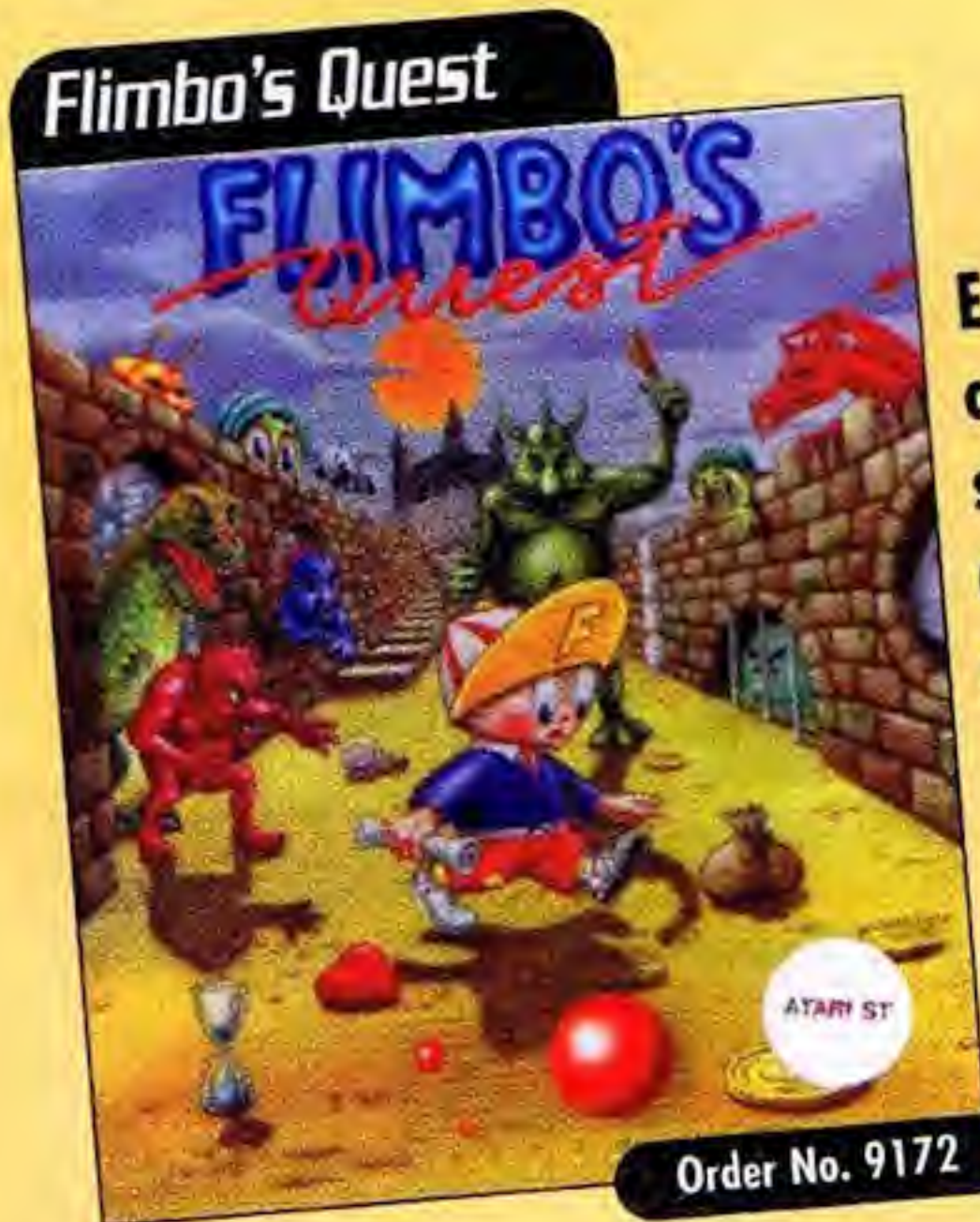
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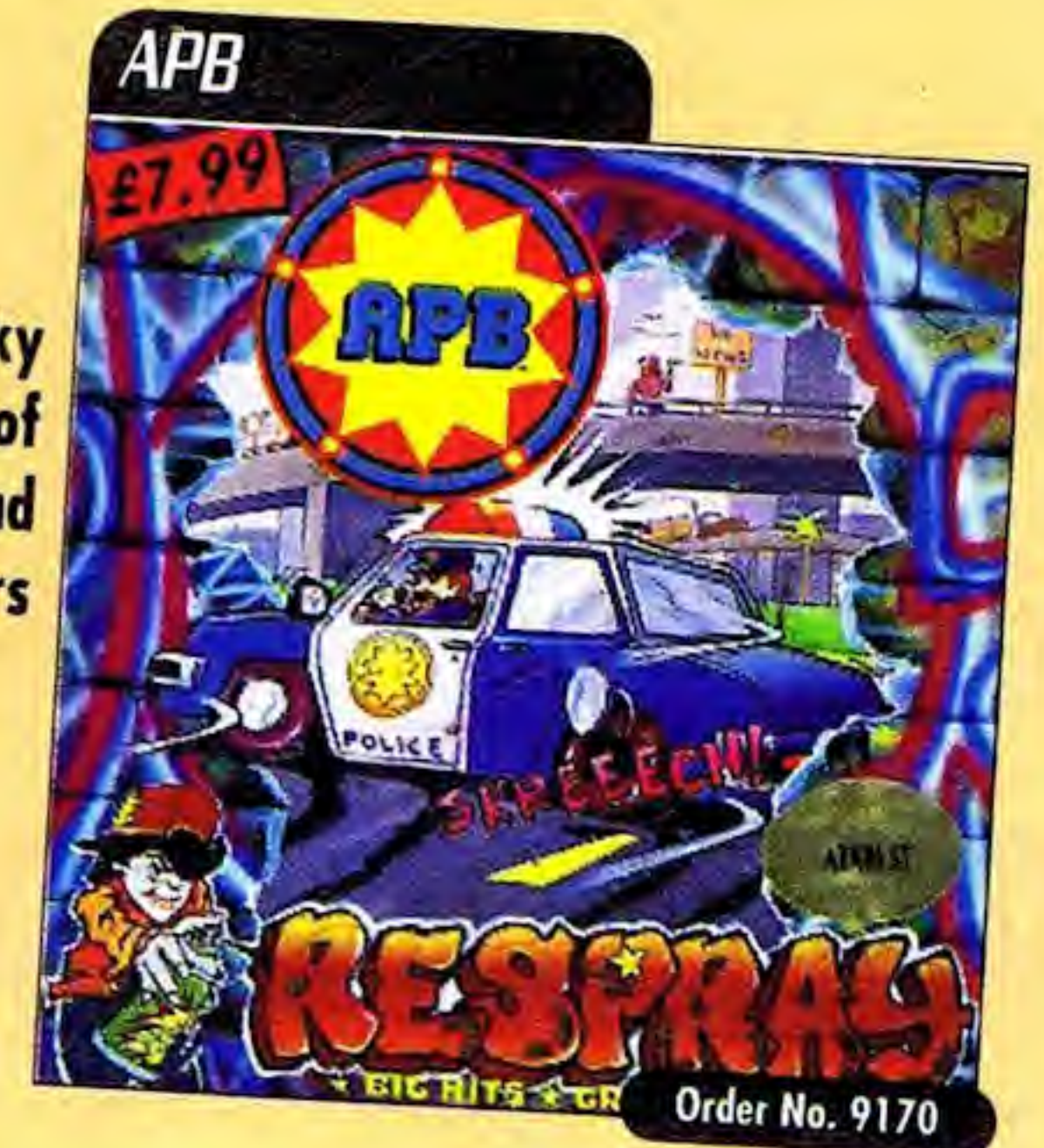
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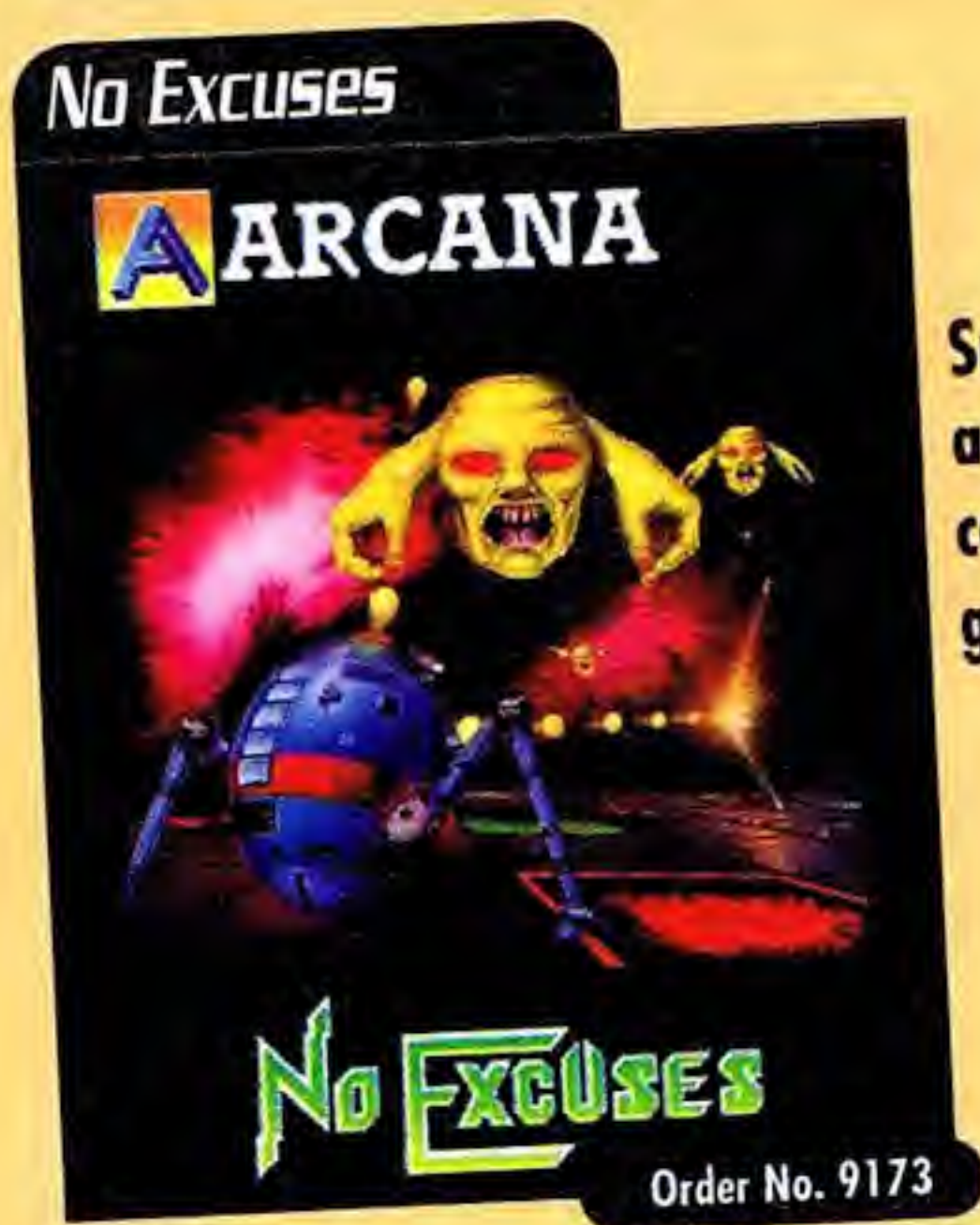


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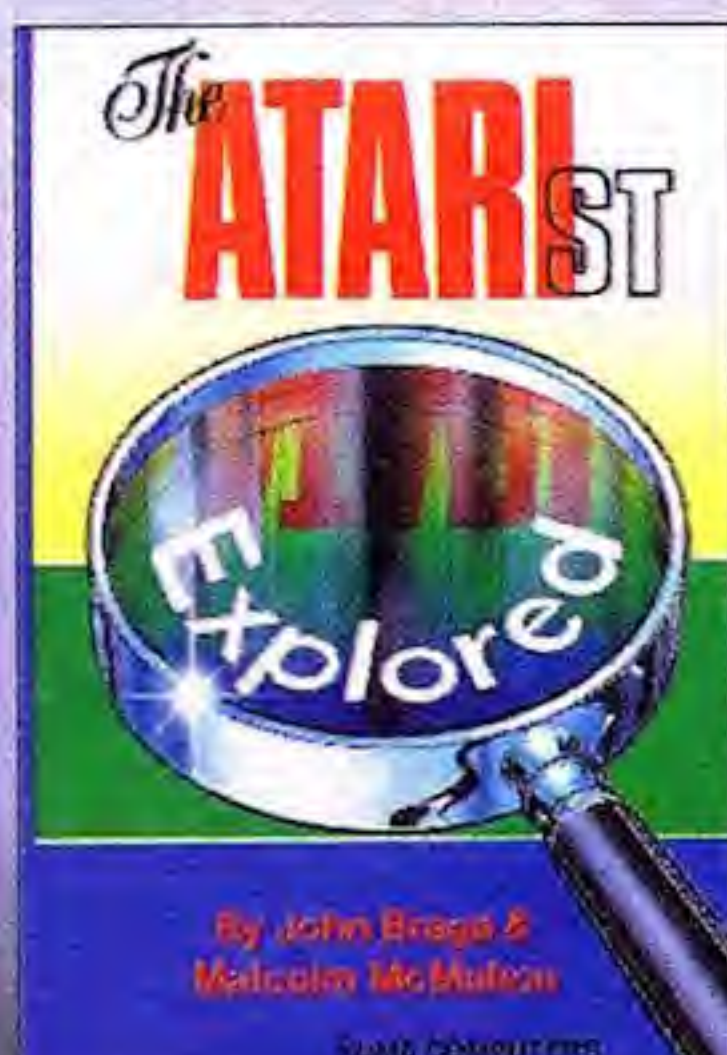
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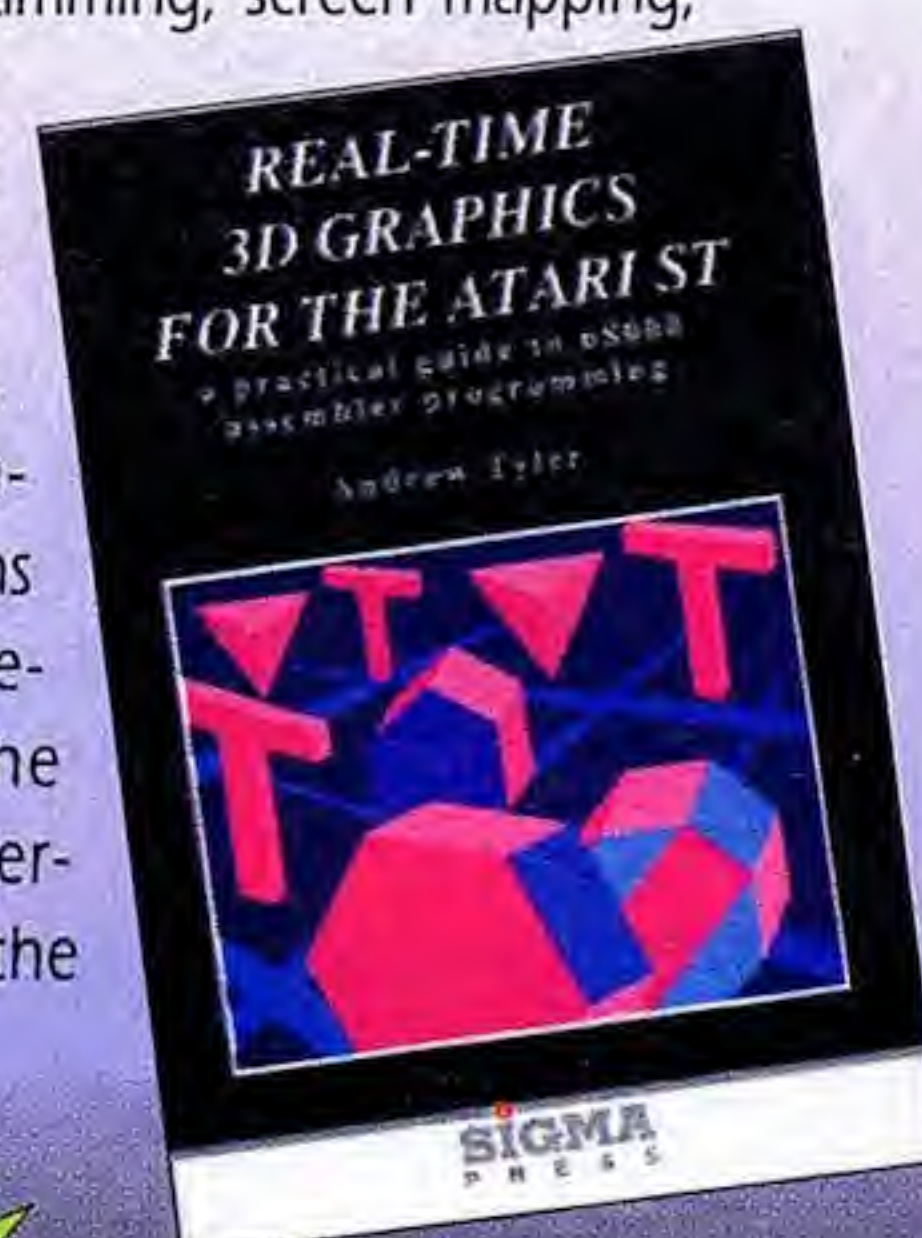
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Multi-timbral

Most synthesisers you're likely to use with your Atari offer something called multi-timbrality. You probably know the term as a multi-timbral synth, or one which can play lots of things at the same time, as one half of the equation – the SDT being the other – that allows you to emulate a whole band in two desktop boxes.

But unfortunately, try playing 24 instruments at once and you'll soon realise that the machinery will simply refuse.

It'll start cutting out tracks, which renders the whole process useless. So why won't it play 24 things at once as it should?

Many sounds are made up of more than one voice. If you select a breathy, rich synth sweep of the type so loved by ambient acts and the Enigmas of this world, you'll probably discover that the sound is made up of two or more voices.

So you could only ever play 12 or even eight, and not 24 of these sounds at the same time.

If you construct a drum track

You've got your new, GM-compatible synth rigged up and your ST running your chosen sequencer. You're just adding the fifth layer of bongos to your drum track when things start going weird. Phil Morse knows why

containing a fast bongo pattern, over fidgety hi-hat patterns, you'll probably find another half dozen of your voices have been used.

Then hit two or three humungous piano chords, each with seven notes in it, and you'll probably have finished off your 24 voices – and you haven't even started on the bass, horns or woodwind yet!

So how can the computer musician with just one sound module get around these worries? By being aware of how your voices get used

up and taking steps to combat the effects. Here are a few tips:

- Alter all percussive note lengths so that they are as short as possible. A drum hits as soon as its note is turned on, so there's no point having the note any longer – it will just jam the channel involved.

- Try to avoid two-voiced presets (your manual will tell you how many voices make up each sound), especially when in multiple use.

If you must use them, don't play huge chords with them. Every extra note takes two voices away,

remember!

- Avoid the sustain function like the plague. It's all very well harping on about natural feel, but unless you've got a synth module dedicated especially to expressive, sustain-ridden piano playing, it's simply impossible to use sustain without messing up your synth's entire multi-timbrality.

The reason is that with the sustain pedal on, no channels are ever freed. Hit two six-note piano chords in succession with sustain held on and you'll have used 12 voices.

If your piano sample uses more than one voice to make the sound of each key, you'll have used 24 – or all of them. Not good.

- Get a drum machine. Drums are notorious for eating up voices, due entirely to the number you tend to have playing very close to each other, and getting your drums on another piece of equipment can typically free eight to ten voices for the music.

Almost an essential, this one, especially for the percussion-happy dance brigade.

A to Z of modern music jargon: C

channel: A path through a recording or playback system. Therefore a hi-fi has two channels, one for each of the left and right speakers. A portastudio has four, so you can record and play back four things independently of each other.

A recording studio, typically, has at a very minimum 16 channels, more usually 24 or 32, and often up to 48. This means that when a piece of music is being worked on, there is space for up to 48 different sounds, all capable of being controlled independently of each other!

chrome: Not the shiny bits on a Harley, rather a shortening of chromium dioxide, an oxide used in higher quality cassette tapes. Spottable by "70uS" or "Type II" written somewhere on the cassette or its casing, chrome tapes offer better sounding and louder recordings, and are the minimum quality you should use when recording your own music finally onto cassette.

click track: A click track is what helps you to keep in time when playing music. Literally just a constant click, it's best compared to the tapping of a foot, or a metronome. Drummers use click tracks to play at a constant speed by playing along with a predetermined click in their headphones, and on sequencers such as Cubase or Notator, you could use a click track to keep a

composition in time well before you've got around to recording the drums.

crosstalk: Unwanted 'bleeding' of one channel of a recording system into another. To experience it, turn your home CD player on, and set your amp to Phono (but don't put a record on). Turn the volume on full and you'll just about hear the CD player (you might have to put your ear close to the speaker). This is an example of crosstalk in a home hi-fi. Imagine it on a 24-track mixing desk and you can begin to appreciate the problems it can cause.

cut: On a sequencer, it is possible to highlight a chunk of music and remove it from where it currently is to put it somewhere else. For instance, you could take a chorus off the end of your song and slot it in at the beginning, by highlighting the chorus part on your screen, cutting it and placing it in the new position.

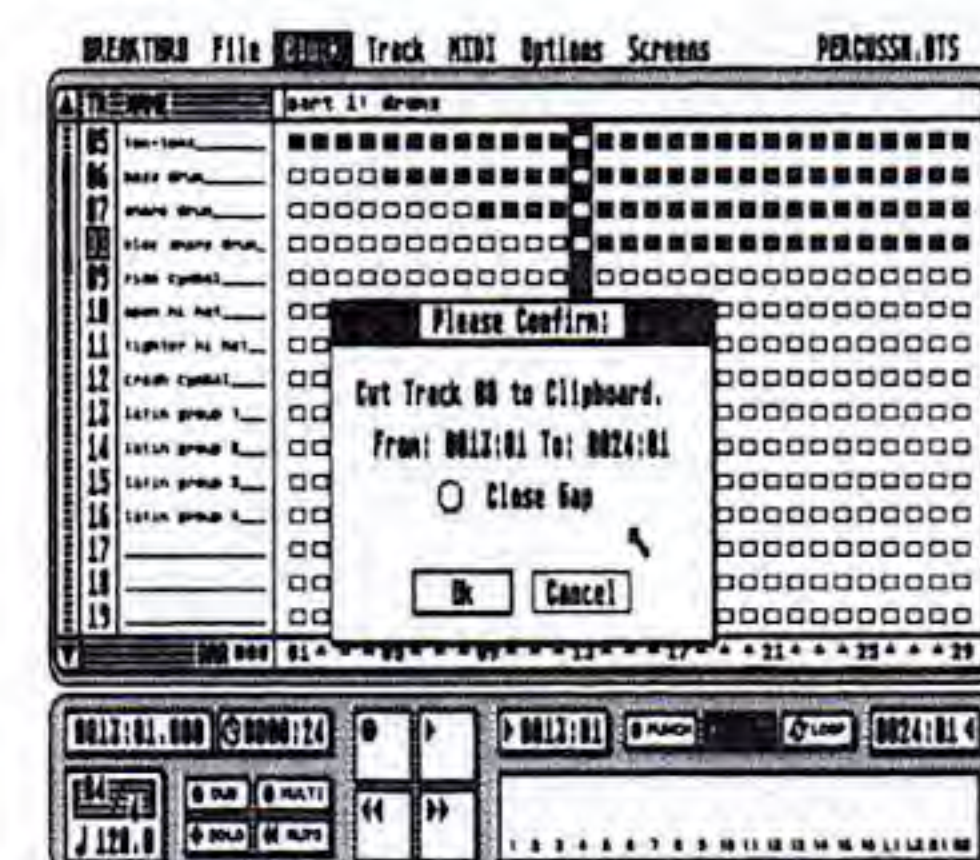
copy: Like cut, except when you copy a piece the original stays where it was. So in the above example, the chorus being edited would, if copied, remain where it was while allowing you to place an exact replica of it somewhere else.

This function is immensely useful if you have a riff or motif you wish to use all the way

through a piece; you can copy it once and then paste it in a number of times one after the other, giving you the same thing over and over again... sound like modern music to you?

count in: when your sequencer gives you the computer equivalent of the guy going 'one... two... three... four...' at the beginning of a piece. Usually comes in the form of four clicks, or drum rimshots.

control changes: In MIDI, the system offers various tweaks to each individual channel, which are controlled from within sequencing software by control changes. These take a value between 0 and 127, and control such things as the volume and stereo positioning (panning) of a sound.



A chunk, or block of music being cut to memory, ready to be pasted somewhere else in the ST Breakthru sequencing program

blues

ST live!

Send your queries, complaints or praise to Phil Morse c/o Atari ST User at Europress Publications, Europa House, Adlington Park, Macclesfield SK10 4NP

Take a sample

I have a 1040STE running Cubase at the heart of my home studio, and I produce ambient/trancy-style dance music containing a lot of samples. I use my home CD player to sample sounds from sample CDs into my Clarity 16 ST sampler.

Although happy with the results, I am now looking to get into sample-based music more seriously, and am prepared to spend what it takes to get a state-of-the-art sampler, controllable by my ST, into my system.

My problem seems to be that there is no sampler on the market which is designed especially for CD sample users. There are so many sample CDs around, you'd think someone would have come up with something. Or am I wrong?

Mark Ashdown, Balham

NO, you're not wrong. Akai sell just the high-end piece of kit you're after in their Cd3000 CD-ROM sample player. It is a member of the legendary Akai sampler series, but custom-designed to allow you to sample directly from its built-in CD-ROM drive.

Of course, things don't stop there, and the flexibility that your excellent but limited Clarity 16 system denies you is provided by the likes of (deep breath) 32-voice polyphony (wow), eight individual mono outputs, channel filters, LFOs and digital envelopes.

It's the sampler that thinks its a synth. I won't tell you the price, 'cos you say you'll pay anything! Just get to a dealer, get a sample play (no pun intended) on it and get saving.



The Akai CD3000, a relation of their fully-fledged sampler the S3000

Music news

● Yamaha have launched a new addition to their portable music production range. Basically a sequencer, synth and rudimentary keyboard all built into one box, it's a follow-on to their successful QY-10 and 20 models.

The QY-300 is bigger, will only run on mains, and has a built-in disk drive. This makes it immediately useful for the Atari musician, as ideas conjured up anywhere with a mains plug can be transferred to your sequencer.

Alternatively songs written using the computer can be transferred to the QY-300 for incorporation, say, in a DJ's set – neat. It is, of course, GM-compatible and has an RRP of £899.

● Techno band in comms shocker! Following hot on the heels of New Order, Manchester techno stalwarts 808 State (named, incidentally, after the Roland 808 drum machine) have announced that they are joining international comms system, the Internet.

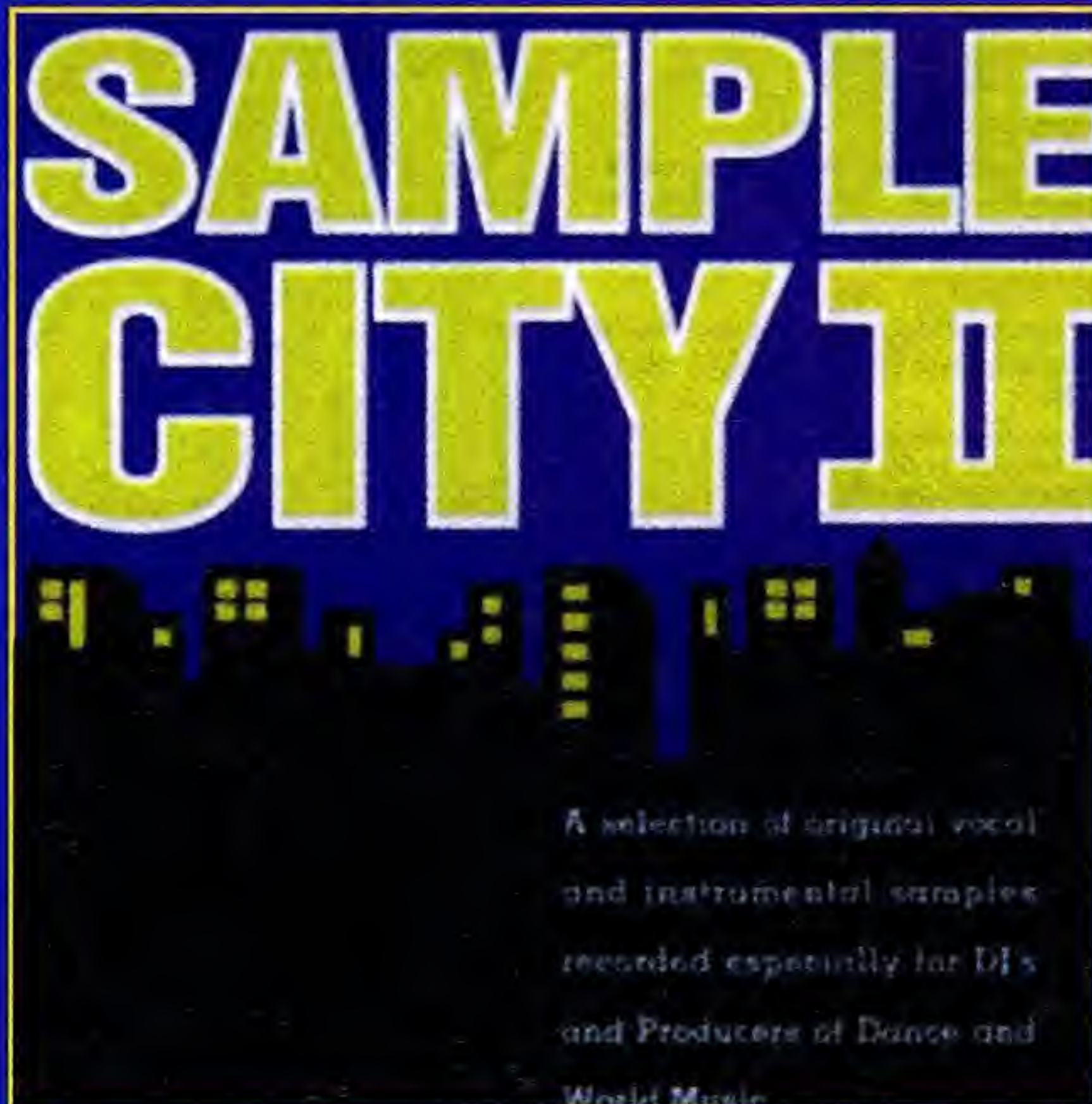
Fans will be able to e-mail their heroes, and the band envisage a time soon when samples will be sent around the country and the world, bringing us ever-closer to a techno globe. For more information, write to 808 state, State to State, PO Box 808, Hook, Basingstoke RG25 1UF.

Unique in design, Yamaha's QY300 is useful to the Atari musician thanks to its built-in disk drive



● Profile Records have recently launched a new sample CD entitled Sample City 2. So what's so special, I hear you ask? Well, you get 37 minutes of samples of a highly danceable nature, including ragga toasting, house hooks and juicy Balearic-style pipes and the like, all for – and here's the clincher – the miserly sum of £10.

So if you've always fancied hooking yer' brother's CD Walkman into your Atari and trying out this sampling lark, this could be the CD to get you going. Phone Profile on 081-995 6229.



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9 770965 778023

Add a replacement file selection utility like Selectric and you can immediately see an improvement in your system. Every time you need to select a file, you're presented with a neat-looking dialogue and many more facilities are instantly at hand.

But Selectric is just one option for a file selector and there are dozens of other utilities that replace equally important parts of the operating system. What's more, many of them are completely transparent in day-to-day use.

NVDI is a good example of replacement code that is installed and then forgotten, although it makes a tremendous difference to any system in terms of redraw speed. The reason NVDI does such a good job is that the TOS VDI routines were written in C and are relatively inefficient. Unfortunately the VDI routines aren't the only poor bits – the printing routines are just as slow.

ANSWER

The programmers of heavy-weight packages like That's Write and Calamus soon discovered the answer and these programs can bypass the slow TOS printing routines by substituting their own, much faster code. Other programmers were quick to catch on and several small custom utilities have been written to speed up print output from other programs.

One of the best utilities is FASTPRNT.PRG by Jeremy Hughes, currently bundled free with Imagecopy 3 and Fontkit Plus.

FASTPRNT is a very small AUTO folder program that intercepts the system print calls and replaces them with direct output routines.

It takes up less than 1K of RAM when installed and can speed up output from Timeworks, Page-stream and many word processors by a factor of two or three.

Of course, speeding up the print code isn't the only way to keep your printer going flat out. Look what happens when you press print.

If you're using a program that produces graphical output such as

Pront a print

Andrew Wright gets more from his printer with a look at spooling and speeding utilities

a DTP program or a word processor that uses scalable fonts, the page (or at least part of the page) will be created in memory as a bitmap image and then sent to the printer.

If the printer has its own memory, as lasers do, the bitmap will be

downloaded into the printer memory and you will be back in control of your computer.

If you happen to have a Deskjet or a dot matrix printer, the bitmap will be sent to the printer line by line, in which case it will be a while before your computer starts to

respond. Even if you're using a text-based program, long documents can still take a while to print.

This is where the spooler comes in. A spooler sets aside an area of your computer's memory, a printer buffer, which is used either to store the image of the page (for graphical output) or the sequence of commands and characters (for text output).

The spooler then works in the background by checking the buffer every fraction of a second and sending data bit by bit to the printer, while still leaving you to work in the main foreground.

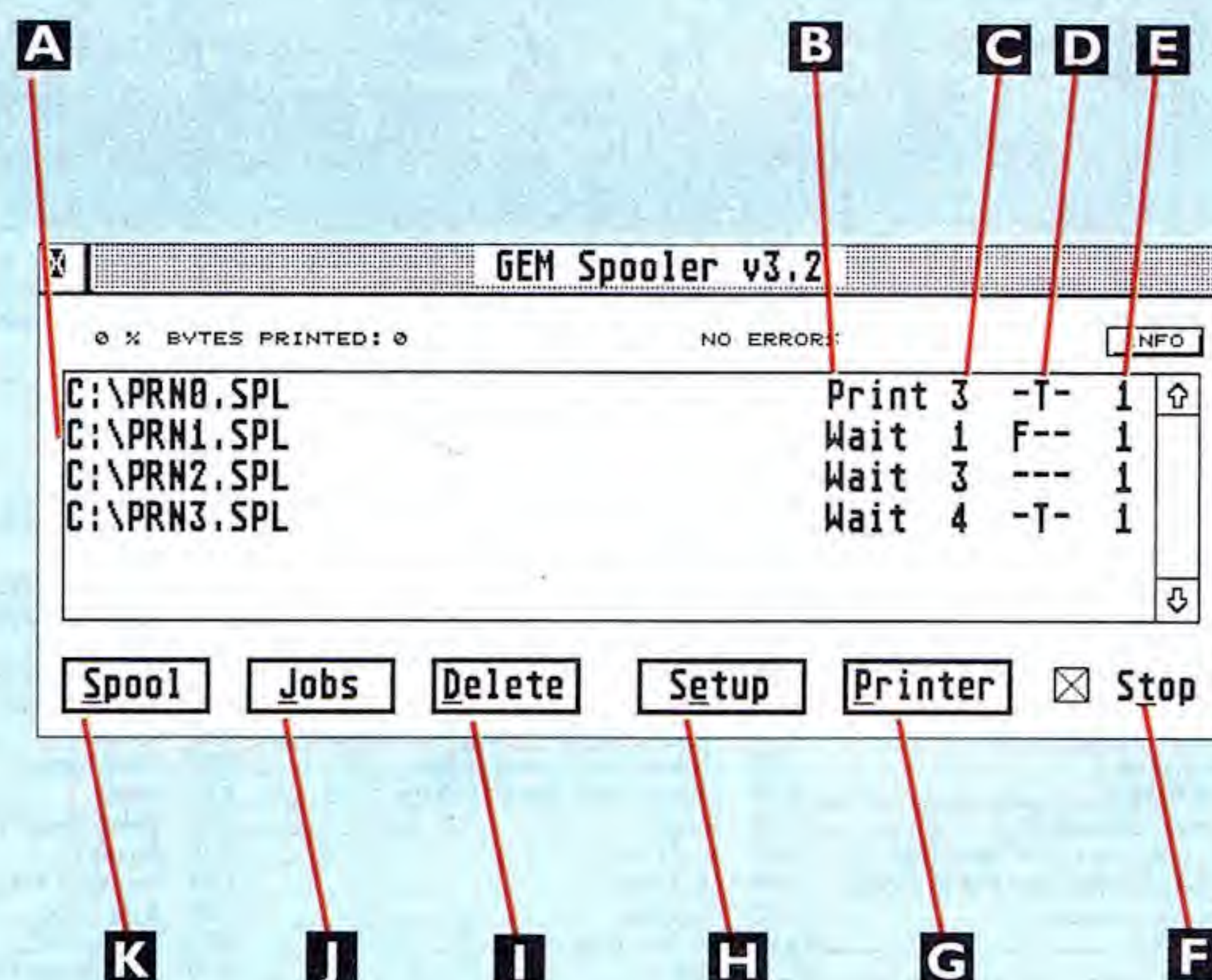
One of the best printer spoolers is GEM Spooler v3.2, a shareware accessory that really sets new standards in printer control. Unusually it doesn't set aside RAM for the buffer but uses disk space instead. It works on any Atari, including the Falcon, but a hard disk is recommended.

The advantage of the GEM Spooler is that control is returned to the program very quickly while the document prints slightly more slowly in the background.

It is highly configurable, however, and each job can have a different priority assigned to it

GEM Spooler 3.2

- A.....Each print job has its own line in the main window
- B.....The current job is marked "print" while the others wait or are on hold
- C.....The priority, a number between 1 and 5
- D.....The letter indicates either a reset (printer is reset before and after), filter (character translation table loaded) or trash (deletes the job file after printing)
- E.....Number of copies required
- F..... Stop printing
- G.....Choose which printer driver to use – Deskjet and various dot matrix drivers supplied
- H.....Opens the setup dialogue
- I.....Delete any job in the window
- J.....Alter a job's attributes)
- K.....Add another file to the spooler



Multiprint

Multiprint is a commercial alternative to GEM Spooler from the FaST Club (0602 455250). The current version is 1.04 and, while still not Falcon compatible, it features a more stable version of the utility for redirecting the printer output, the ability to capture BIOS output from Fontprint, compatibility with the Chameleon desk accessory loader and a fast output option. It costs £9.95 or £2.50 for upgrades for existing users.

Check out the CoverDisk

You'll find a PD program similar to FASTPRNT on this month's CoverDisk in the archive called X_PRINT.TOS. The program is called FPPRNT.PRG and once extracted it should be copied straight into the AUTO folder of your boot disk. It works best with HP-compatible laser printers, though it can still speed up printing to non-page printers like Deskjets and Bubblejets quite considerably.

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Crystal ball gazing

Steve Gold looks forward to a more visual comms future as he gazes into the crystal ball of SVD technology

Very quietly, the government has introduced a new set of self-certification rules for modem approvals in the UK. These new rules make the task of gaining approval for a modem for sale in the UK a lot cheaper, but perhaps more importantly they bring the timescale down from the ridiculous six months or more to a matter of a few weeks.

The move has prompted several modem suppliers to start bringing in modems which were previously unapproved, but this time with the all-important green sticker.

This is good news for the consumer, as modem prices are falling once again but, having spoken to several of the industry majors, it seems that profit margins are being pruned to the point where investment for future products is being cut back – drastically.

PULLED

Megahertz, one of the main suppliers of PCMCIA and portable modems in the US have pulled the plug on their UK and European operations, while Intel have ceased all development work on their PCMCIA modems. According to Intel, the 100 or so staff working on PCMCIA modem technology are being redeployed within the company.

Although Megahertz and Intel have their own official blurb on why the pullout/re-deployments are taking place, they both boil down to the same thing – severe price reductions (of the order of a third) on portable modems over the last year.

While it's a fair observation that ST users are less than concerned with developments in the PCMCIA modem marketplace, most serious development work on modems is taking place on the PCMCIA front.

No development work on PCMCIA means little or no progress on the desktop modem front.

Fortunately, all is not lost. Intel are refocusing their modem development work on the next generations of modem-like devices, known as Simultaneous Voice and Data (SVD) units. Intel plan to unveil their first generation of SVD products at the Comdex Fall computer show in the US this November.

These SVD devices will be capable of moving data at 28,800 bits per second, the newly agreed V.34 modem standard, and will also cope with moving data at similar orders of speed while an ordinary telephone conversation is taking place!

This has important ramifications for modem usage generally. For example, serious home and office modem users now tend to use a dedicated second phone line for their online system usage. Using SVD, it should be possible to dial into your nearest packet data network (PDN) node and log on to your favourite online network, while being able to make and receive ordinary voice calls at the same time.

This quantum shift in modem usage technology depends on whether BT and Mercury can support SVD on their exchanges, of course, but since Rockwell are working on a so-called Universal Modem Chipset (UMC) which is already being test supplied to

modem manufacturers in the US, and since Rockwell supplied driver chipsets to 80 per cent of the modem marketplace, it's logical to assume that this will happen.

"It could happen, but it would require a considerable degree of investment by BT," commented Bill Pechey, technical manager with Hayes, who are working on SVD technology.

"There's no doubt that SVD is going to be big, but the problem for the communications industry is in thinking up applications like this

for the technology," he said. Meanwhile CompuServe have confirmed they are beta testing their

Usenet Internet links, in preparation for launch in October of this year.

CompuServe have commissioned a special graphical interface for DOS, Windows and Mac users (what about ST users? -Ed) to interactively access the Internet. I also hear on the grapevine that extensions to Flash and a number of other ST comms packages are under development.

Reports from CompuServe staff suggest that it will be possible to "drive" the Usenet interface without a graphical user interface, but the full facilities will not be easily accessible. The official line from CompuServe is that the GUI

should be used at all times.

The bad news is that, as widely rumoured on CompuServe's forums and discussion areas, the Usenet facility will not form part of the online services' basic service, which allows subscribers flat-rate off-peak access.

Instead, subscribers will have to pay \$4-80 per hour (and pro rata) for access to Usenet and other "extended services."

NETWORK

As this issue of comms corner goes to press, the Delphi service is looking a bit light on the UK side, since, like CompuServe, it runs on the main US network, with Delphi UK offering UK local dial-up to the system. But by the time you read this, I am assured that the service will have a "large number" of UK-specific facilities.

Two levels of subscription will be offered – level one at £10 per month, and level two at £20 per month. All charges are plus VAT and billed via plastic.

Level one subscribers get four hours of access free of charge, with additional hours being charged at £4 per hour. Level two subscribers get 20 free hours per month, with extra hours charged at £1.80 per hour.

Direct dial access is available in London, Reading, Manchester and Edinburgh using the Sprintnet packet data network at all modem speeds to 9,600 bits per second (bps). National access is available using BT's Dial Plus packet data network – again at all speeds to 9,600 bps – at £1-50 per hour data network surcharge.

While the data network surcharge is similar to that of CompuServe's, level two subscribers seem to get a good deal.

The question is – will online users be prepared to shell out £20 per month for access to Delphi? Time alone will tell.

CompuServe: 0800-289937
Delphi: 071-757-7150
Hayes: 0252-775500



IT'S HERE! AND IT'S HOT



Look out! There are some stray cats coming into the country! Some USA Jaguars have been imported into the UK unofficially. This imported product has been manufactured for America and is not compatible with UK Jaguar equipment. Look out for the UK sticker above on the Jaguar products you buy. This will ensure it is official product and will work properly in the UK.

AWESOME SOFTWARE



There are almost 100 companies in partnership with Atari for Jaguar software, with over 50 cartridge titles in progress. The following are the current titles, with Atari's release dates. Return the coupon for a full list.

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Before you decide when to buy your Jaguar console, we suggest you think very carefully about WHERE you buy it. Consider what it will be like a few months after you have made your purchase, when you may require additional peripherals and accessories or help and advice. And, will the company you buy from contact you with details of new products? At Silica, we ensure that you will have nothing to worry about. With our unrivalled experience and expertise, we can meet our customers' requirements with an understanding which is second to none. Complete and return the coupon now for our latest FREE literature and begin to experience the "Silica Service".

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E&OE - Advertised prices and specifications may change - Please return the coupon for the latest information.

Although everybody tends to associate scanners with the glamorous business of importing photographic images into DTP documents, a more modest but equally important use is to digitise straightforward line art such as cartoons, logos, maps – in fact everything that does not contain true shades of grey and can be captured by simply distinguishing between black and white pixels.

There are no complicated calculations regarding the scanning resolution to be made here as long as your scanner can work in the same resolution as your intended output device: typically 300dpi for a laser or inkjet printer.

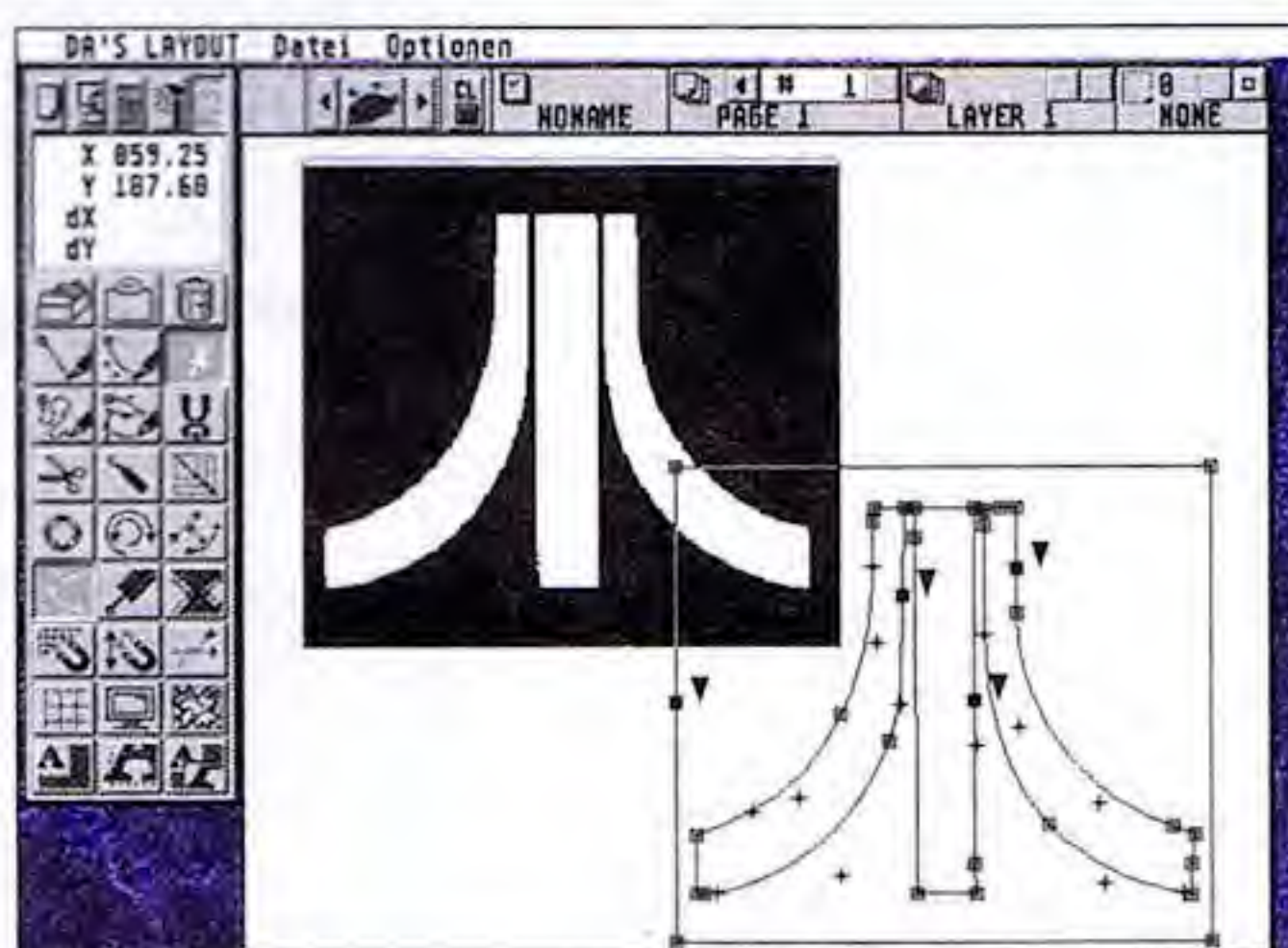
REPRODUCE

This is provided that you are happy to reproduce the artwork at its original size. If it needs to be enlarged or reduced, it is better to do this at the scanning stage rather than leave the scaling to the software in order to avoid aliasing (the pixel steps that appear in diagonal lines and curves and get worse with enlargement) and other distortions.

The basic formula to be applied is quite simple. For 300dpi laser output, you divide the required size of the image by the actual size and multiply this by 300 to arrive at the scanner resolution needed. Alternatively, you could determine the scaling factor by multiplying the result of the division by 100.

Another approach is to scan in the artwork at the finest resolution possible and then convert it to a vector drawing using suitable autotracing software. This is particularly handy with symbols such as company logos which

Lining up your line art

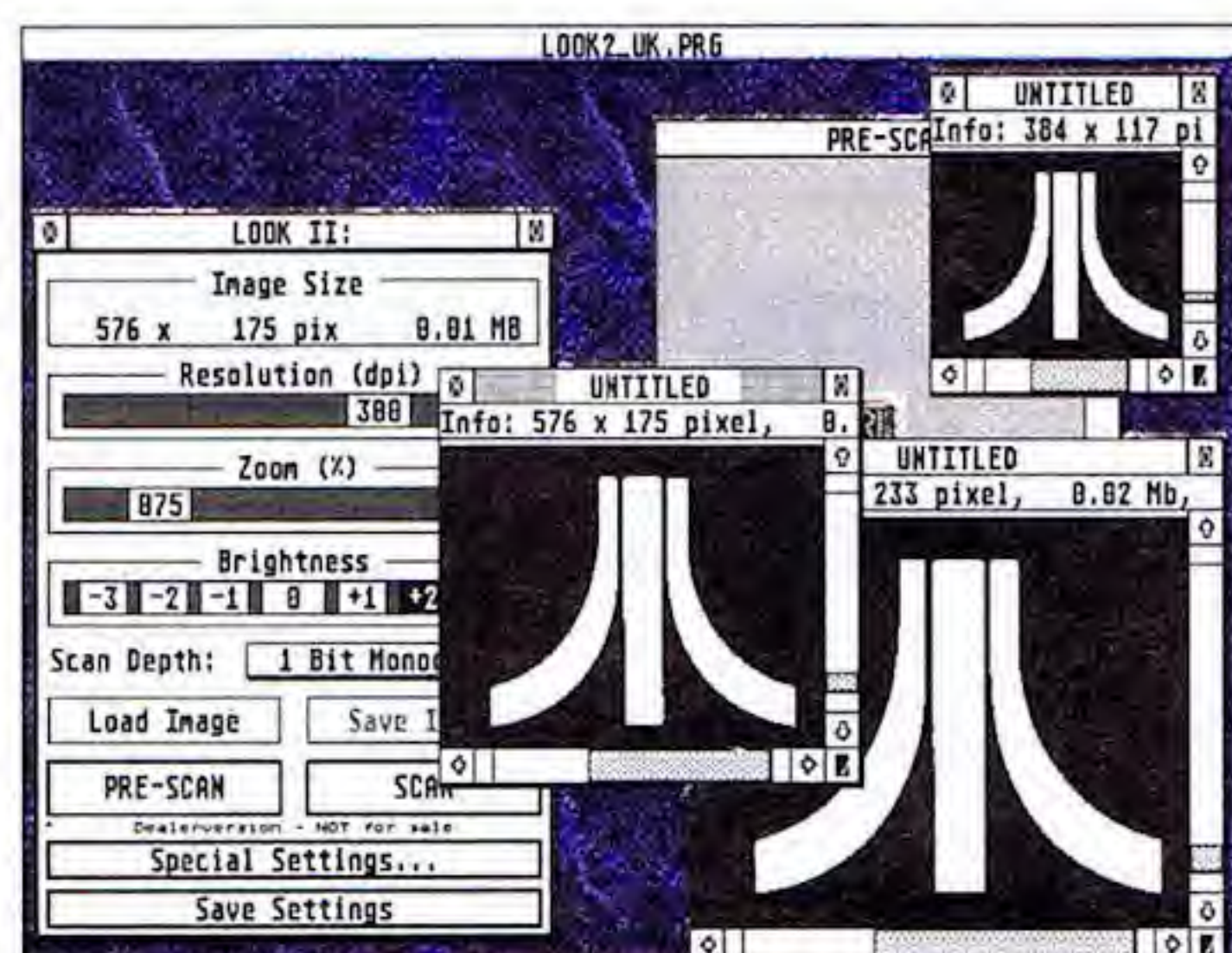


Autotracing software will convert the pixel image into vector paths consisting of straight lines and Bezier curves

tend to be used repeatedly at various sizes and perhaps even on various printers with different output resolutions. You only need to keep one vector file on your disk rather than a whole range of bitmaps in different sizes – and vector files are a lot smaller than bitmaps anyway.

The only problem with vector images is that they are not as portable as the ubiquitous IMG and TIFF formats: different DTP packages have quite different ideas as to what constitutes an acceptable vector drawing.

The Calamus CVG and GEM metafile formats are the most common, but are still subject to erratic interpretations, so check out the formats you can use carefully before committing yourself to any particular one.



The Atari logo scanned from a PR photo at different scaling factors and resolutions. With a bit of foresight and an understanding of the very elementary calculations involved, you should never experience the unsightly distortions caused by software scaling of bitmaps

Tip of the month

Very subtle drawings or poor originals can be difficult to scan as fine lines get broken or do not show up at all. It often helps to try out different settings for brightness and contrast in the scanner software but if that is to no avail try using a good photocopier. These tend to have better optical mechanisms and will produce a bolder, blacker copy for you to scan.

Continuing his introduction to scanners, **Günter Minnerup** turns to the easy bit – digitising monochrome line art – and offers a hint about hints

Hints on fonts

There are obvious aesthetic judgements to be made when choosing typefaces for your work (more on that in future instalments of this column) but equally, if not more important, is the choice of font technology.

Given the price of good quality fonts, a reasonable selection to cover a variety of DTP jobs can easily cost you more than the DTP software itself, so it's obviously a good idea to think about what kinds of fonts are best for your needs even before you select your DTP program – I know of people who have dumped one package in favour of an alternative one for this reason alone!

As with so many things in desktop publishing, a lot depends on the intended output device. High resolution imagesetters will give excellent results with all well designed fonts, irrespective of the font format, but laser printers are a different matter, especially at smaller body text point sizes, up to about 10 or even 12 points.

300 dots per inch is not really enough to give an adequate rendering of the subtle shapes of a font like Palatino at these sizes, and so the raster image processor translating the vector outlines (if outline fonts are being used) just has to do its best with what's available.

This is why the good old fashioned bitmapped GDOS fonts can be superior for smaller point sizes on laser and dot matrix printers. Provided they have been hand crafted and optimised for a particular size and resolution, they will almost certainly look better than vector fonts. Some DTP packages offer you the choice of outline or bitmapped fonts. With Fleet Street Publisher (now sadly no longer available or supported), for example, I often combine bitmapped body text fonts with vector fonts for headlines and display.

The only vector font format which goes some way towards dealing with this problem is PostScript Type 1 which includes the so-called "hints" – additional information that enables PostScript raster image processors to modify the basic outline according to the point size and resolution used.

If most of your work is going to be printed on lasers you may well prefer PostScript Type 1 fonts to Calamus or other vector formats. You can study the effect for yourself if you have DA's Layout which can make use of both formats, by printing out an eight point text first with PostScript Type 1 fonts and then again using Calamus fonts. The difference is quite striking.

And what if you don't have access to a PostScript printer? With DA's Layout it doesn't matter since the PS fonts can be converted to the program's own internal DFN format which preserves the hints. With other programs capable of PostScript output, you will need CompoScript which provides software emulation of PostScript and works with most printers. But more about PostScript and CompoScript another time.

ST ACTION BACK ISSUES

These days *ST Action* is incorporated into *Atari ST User*. However, if you missed any of the original issues and their great CoverDisks, when *ST Action* existed in its own right, here's your chance to buy them. But hurry – stocks are limited.

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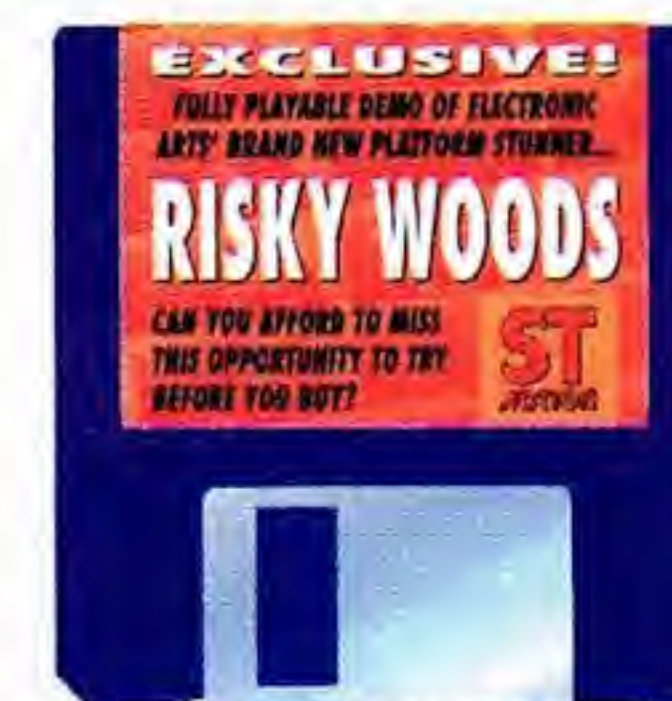


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And a message from us to your newsagent: Atari ST User should be available from your local wholesaler. If not, contact the Circulation Department at Europress on 0625 878888.

Last month I explained how to make sure your mailshots were effective by writing a persuasive letter outlining the benefits of the offer.

Once you've "rung the bell" and the orders have started arriving in an avalanche – or at least in pleasing numbers – you have a brilliant opportunity to promote your business and its products or services further.

Rule number one when fulfilling an order is that the act must be far more than simply providing a product or a service in an impersonal manner totally unrelated to anything else.

You will probably have a range of products, or a list of other services. Use this opportunity to tell your new customers about them by enclosing material produced on your ST. You would be surprised how many firms – particularly new ones, the very ones who depend on increasing sales for their very survival – fail to capitalise in this way.

INFORMATION

Use your word processor and/or DTP package to produce the kind of information which will leave customers in no doubt that:

- Your firm is delighted that the person has bought one of its products or services
- You want your new customer to derive maximum benefit from whatever he/she has purchased (don't just tell them that – include instructions that are easy to follow if the item bought is the slightest bit complicated to use)
- You have other products/services or upgrades/accessories for the item just purchased which you can provide quickly and efficiently – possibly at discounted rates for an existing customer
- You are delighted to receive

The follow-up to success

Your mailshot or advertisement has paid off and you've just won a pile of orders. You now have an opportunity to further promote your business at virtually no extra cost.

Richard Williams explains how

enquiries by phone, fax (if you have a machine), post or personal visit

- Your business is achieving great things (it wouldn't have got this far if it wasn't). List the main achievements, but don't go into detail which a customer may find boring.

Even if you are currently a one-product or one-service outfit, you may have plans for the future. You may wish to tell your new customers about these as well, without giving too much away to likely competitors. Be sure to write to the customers again when the new items/services become available.

Aim to create the impression that you are immensely pleased to have a new customer (that shouldn't be too difficult for a small business – you undoubtedly will be

pleased!), and that you are a competent outfit capable of providing much more at attractive rates.

Don't think that because an order was for, say, a new style of brush for washing a car, that your customer won't be interested in a new, easier-to-use, faster pump for bicycle tyres. Plenty of people who have cars have bikes as well, or their children or other relatives do.

OPPORTUNITY

Remember, apart from the cost of some paper, printer ink or toner and a few hours of creativity on your part, this is a free opportunity to promote your business.

To summarise, whenever you make a sale, go through the following checklist to ensure you

have not failed to miss a single trick in further promoting your business:

1. Have I adequately expressed my delight over the customer's decision to buy from me?
2. Have I made certain the customer has all the information needed to make full use of the product/service?
3. Has the customer been informed of ALL other products/services available from the business, including upgrades/accessories?
4. Have I included full details of any special discounts available on other items for new customers, and included an order form to make it easier for the customer to respond?
5. Have I told the customer of any products/services which will definitely be available in the future?
6. Have the customer's details been entered into the database for future contact?

The above six items are intended as a basic guide. There may be several other points you can add to this list yourself, depending on the type of business you are in.

Your ST will be of enormous help in meeting every requirement of order fulfilment – including the more mundane but essential things like receipts/invoices and statements/reminders.

Remember: your business depends on customers. If you don't keep them happy, someone else will. Nurture them, and your business will grow.

New products flop

For every ten new product launches, eight will fail.

That stark fact is reported by the Chartered Institute of Marketing, Europe's largest professional body for marketing and sales.

To try to improve on this abysmal record of failure, the Institute has joined forces with the Department of Trade and Industry to develop an initiative which will show UK businesses how to improve the odds.

Key factors for separating winners from losers are that the former follow market-led processes and maintain strong customer focus throughout their organisations.

ST User will also play its part in improving the rate of success of new products – next month, on this page, I will be starting a series dealing with marketing procedures for launches, with plenty of tips on how your ST can help.

- For further information on the CIM/DTI initiative, call the Chartered Institute of Marketing on 0628 524922



Keep details of all your customers in a database – like Fastbase, by Andrew Brown, which is available as a try-before-you-buy shareware version. Keep it up to date and you will find it easy to inform all your customers when new products, upgrades or accessories become available

Atari ST User back issues and binder

Have you missed one of our past issues? Well now's your chance to bring your collection up to date – but hurry stocks are limited!



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FEATURES: Improvisation programs, professional Atari support and DTP guide pt.1
REVIEWS: Video Titler, Falcon Speed, View II, scanning solution and NVDI 2.51
ON DISK: Word Writer VALUED AT £50



NOVEMBER

FEATURES: Ray-tracing for Atari computers, music on the Thames, printer round-up and DTP guide pt.2
REVIEWS: Atari Works, HP Portable printer, Microvitec Cub-Scan monitor and Supermon
ON DISK: Prodata VALUED AT £80



DECEMBER

FEATURES: Genlocking, home accounting, how software reaches the shop floor and jargon buster
REVIEWS: Protekt 6, Chagall, Sweet Sixteen and Ultimate Virus Killer 5.9
FREE: 32-page ST Action games supplement
ON TWO DISKS: Demos of Protekt 6 word processor and MicroProse's Dogfight air battle



CHRISTMAS

FEATURES: Best software and hardware recommendations and hardware buyers' guide
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FREE: 64-page booklet
ON DISK: Prism Paint II demo



JANUARY

FEATURES: Transform images using morphing techniques
REVIEWS: Harlekin 3, Easy Text Vector, Chroma 24, Mortimer and Geneva
ON DISK: Vidi ST (12) software



FEBRUARY

FEATURES: Memory upgrades, information transfer, how to avoid mail order misery
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ON DISK: Tempus 2 VALUED AT £40



MARCH

FEATURES: Desktop Publishing guide, Virtual Reality, Data Compression
REVIEWS: Audio Master, DA's Picture, Clarity 16, Thought!, CP-GEN, Digit
ON DISK: Easy Text Plus VALUED AT £20



APRIL

FEATURES: 25 Essential Utilities, Education, Atari Computers at Birmingham University
REVIEWS: Copyist DTP, GEM-View, Pixart
ON DISK: DA vector demo, Photochrome v4



MAY

FEATURES: Video Vitals, Frankfurt Music Show, CeBIT, Education round-up
REVIEWS: Breakthru 2, True Images, Papyrus
ON DISK: GIP Image Processing, Violence



JUNE

FEATURES: Speed, Noise Tracker guide, education software, Digital Arts profile
REVIEWS: SJ144 printer, fax modems
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JULY

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AUGUST

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 Please place your orders using the Readers' Offers form on page 69

A few issues ago I looked at Gasteiner's monitor switch for connecting various types of monitor to a Falcon. One reader, Andy Richardson of East Sussex, took me to task for failing to mention multisyncs.

I had my reasons; multisyncs can't display all the Falcon's RGB modes without hardware modification. But as Mr Richardson provided details of what turns out to be a very simple job, it's time I passed it on.

FREQUENCIES

A multisync monitor is one that is capable of working with a wide range of input frequencies. On an ST, for example, a multisync will display all three resolutions – ST high, ST medium and ST low. When connected to a Falcon however, the computer thinks it is connected to a VGA monitor so you can't access any of the RGB modes and in particular the all important high resolution true colour mode.

Despite this, the multisync has several advantages. It is clearly more ergonomically sound to have just one display on your desk and it's cheaper to buy a multisync than separate VGA and RGB monitors.

Also, the multisync will be just as capable of expanding the screen with products like Screenblaster and Blowup. Models like the Microvitec 1438 from Ladbroke

Missing link

John Hetherington looks at a new image collection and a missing multisync

Computing even have hardware controls for extending the edge of the picture to the physical edge of the screen display.

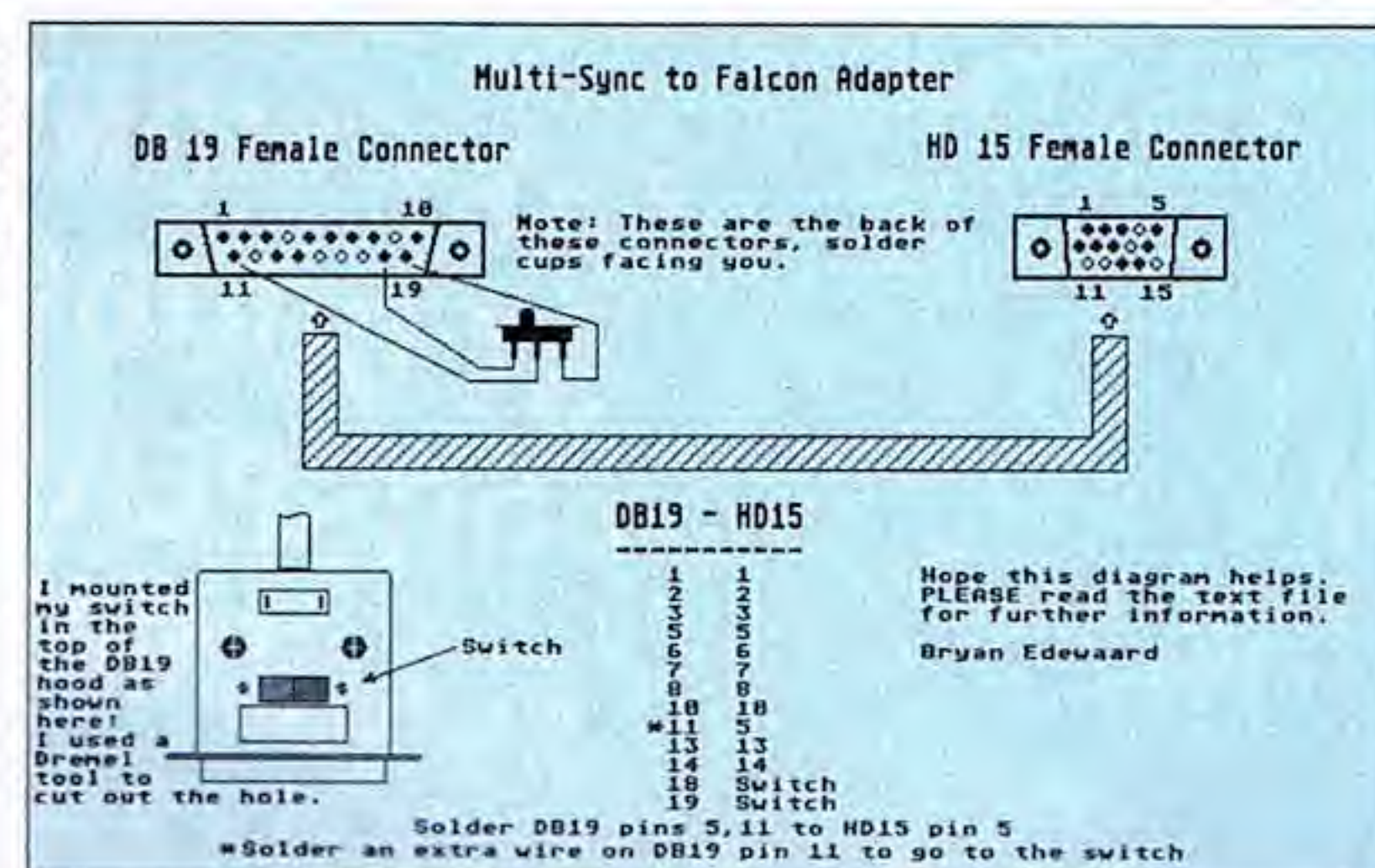
MONITOR

The Falcon's video port has two pins M0 and M1 that tell it which type of monitor is connected and it checks them each time you boot up or change the screen resolution.

Four combinations are possible: a mono monitor such as the SM124 (both = 0); a colour RGB monitor (M0 = 1); a VGA/SVGA (M1 = 1); and a TV (both = 1).

The necessary modifications for multisync monitors, which involve

The diagram that accompanies the FALCADAP instructions



£6 worth of parts from any electronics supplier and a couple of hours work constructing a switch to alternately ground M0, are well-documented in a file called

FALCADAP. It is available from all good PD libraries. Alternatively, you can send a blank disk and SAE to me, care of the magazine and I'll happily send you a copy.

A winning combination

The most exciting Falcon-only product I've seen this month is a collection of images on CD-Rom which is being supplied with a dedicated viewer utility on floppy disk from the folks at It's All Relative in the USA.

Winning Pictures features 100 award winning images from German photographer Wolfgang Hawerkamp. They are all present in PhotoCD format at resolutions up to 3072 by 2048 pixels and in 256-colour Windows BMP format for faster access.

For 90 of the images there is a related music file between 7 and 16 seconds long in Windows WAV format. Topics include landscapes, animals and sport and a collection of miscellaneous images.

The software is a dedicated version of Photo Show Pro that works only when the Winning Pictures CD is in the CD-Rom drive. It contains one important enhancement for the owners of Atari SC1224 monitors which tend to display a very dark picture when used with the Falcon. The new feature is a gamma correction facility that uses a specially created look-up table to brighten images on screen.

Several ready-made script files (in Photo Show *.VB format) are supplied covering each main image topic, as well as a thumbnail sequence that uses five ready made thumbnail screens in FTC format (the Photo

Show raw screen format).

The script driven slide show program will run in any high resolution Falcon screen mode, including true colour, though it doesn't work with NVDI. The pre-programmed scripts display the images at 384 by 256 pixels and play the accompanying WAV files though you can edit them to include some of the 20 or so exciting transition changes such as open curtain, wipe, strip, roll out and jumble.

You can also write your own scripts, using different sampled sounds and other images stored on your hard disk. If you prefer though, the Winning Pictures CD-Rom must be in the drive at all times.

The images are all copyrighted, though you can convert them for your own use into EPS, TIFF or RAW formats using the included conversion utility, PCD_EXP.PRG.

Although the CD-Rom documentation is all in German, instructions are included on the floppy disk and there are two text files describing each of the images and the music files. The quality of the images is stunning, the software easy to use and the price is extremely reasonable at \$29.99.

Contact IAR at 2233, Keeven Lane, Florissant, MO 63031 USA or telephone 0101 314 831 9482.

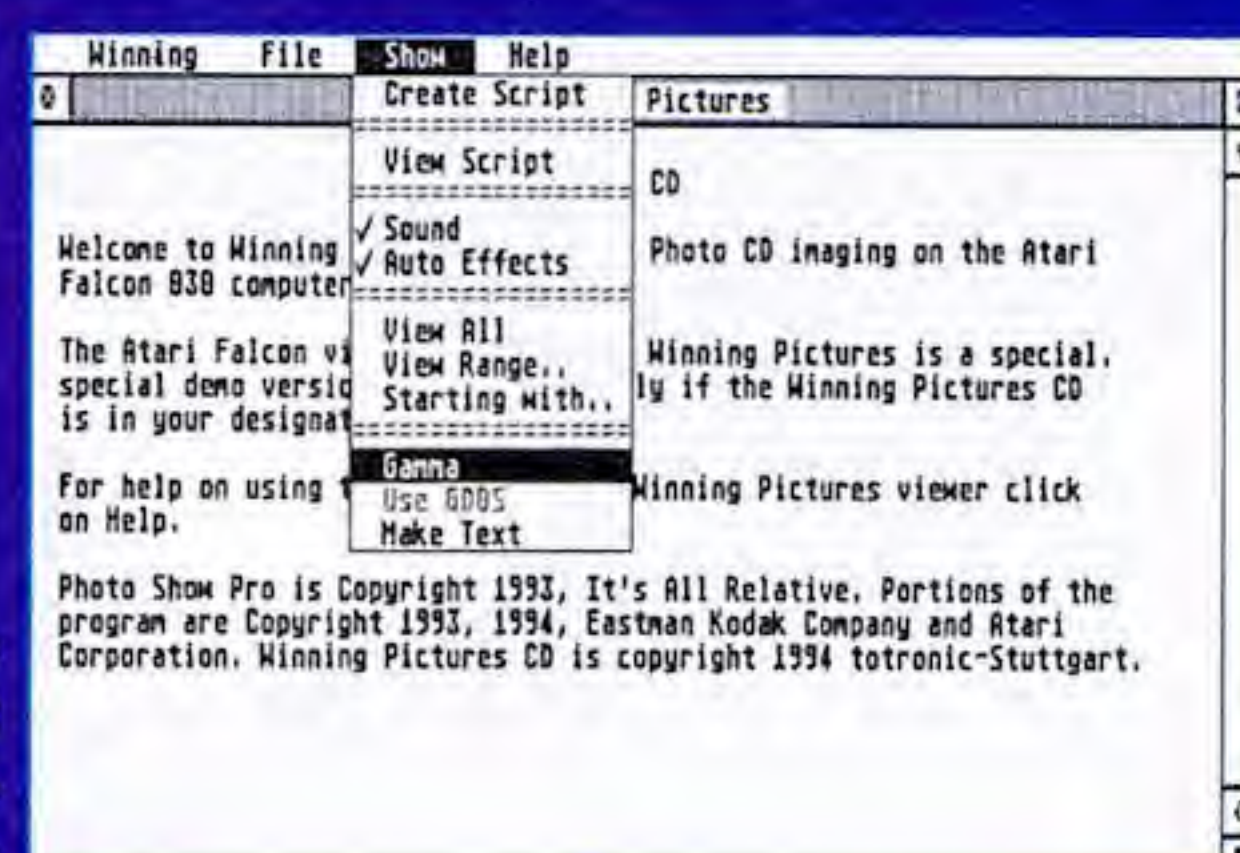


Seagull in flight, Ireland, by Wolfgang Hawerkamp



Monument Valley, USA, by Wolfgang Hawerkamp

The dedicated viewer utility



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